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November 21, 1960

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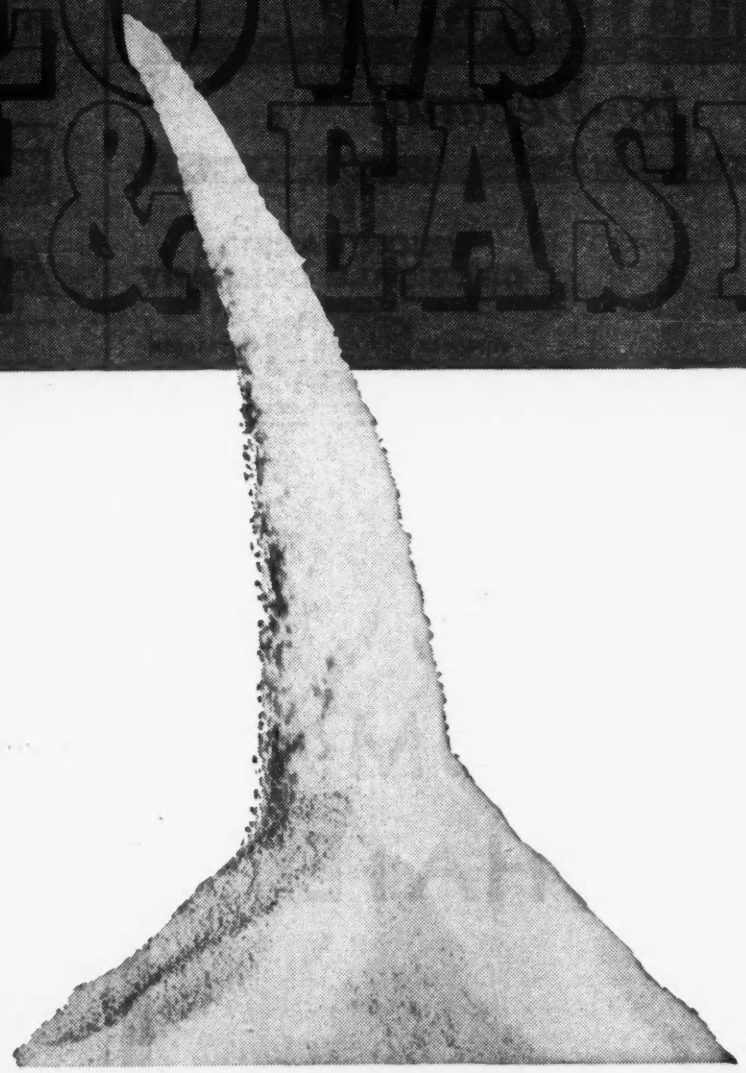

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Oil, Paint and Drug Reporter

Vol. 178 No. 22 30 Church St., New York 7, N. Y. November 21, 1960

HEYDEN INT'L G.M.: Michael J. Gluck, appointed vice-president and general manager of its Heyden Newport International Division by Heyden Newport Chemical Corporation, New York.

Military Drug Buying: A Crimp May Be Due

Veterans Administration and Military Medical Supply Agency may soon find a crimp in their newest buying gambit—put there by President Eisenhower's order that government agencies cut back on foreign purchases.

The White House dictum, aimed at stemming the outflow of gold, is seen as a definite block to the latest military policy of buying drugs abroad whenever foreign suppliers could offer lower prices.

While no definite decisions have yet been reached by either agency, officials disclosed that studies are being made of their procurement policies in the light of the White House directive, and reports will be made to the White House by December 15 as requested by the President.

Purchases of foreign drugs is a policy just recently put into operation by Veterans Administration acting, it was explained, in accordance with rulings of the General Accounting Office. One such purchase has been made, a supply of 17,000 bottles of meprobamate for $65,000 from a Danish drug producer.

MMSA, on the other hand, has been making foreign drug purchases for over a year, largely from Italian firms, over vigorous protests of American drug manufacturers that the agency was at least violating the spirit of the US patent laws, if not the letter of the law in such dealings.

A possibility that MMSA and Veterans Administration may get around the White House order by making use of so-called counterpart funds in payment of foreign drug purchases is being studied, at least by MMSA. Counterpart funds are currencies of local governments acquired by the Department of Agriculture in payment for US farm products in lieu of hard currencies.

Paraxylene Output Hike Is Projected by Enjay

Enjay Chemical Company, a division of Humble Oil & Refining Company, yesterday (November 20) announced expansion plans for its Baytown, Tex., paraxylene plant.

Capacity of the plant, which is operated by the Humble Division, will be increased from 65 million to 105 million pounds annually by the end of the first quarter of 1962, Enjay reports. The unit has been in operation since 1953.

Paraxylene is used with the intermediate dimethyl terephthalate in producing polyester fibers and films.

Colors of Small Market Volume Seen Victims of Additives Law Because of High Cost of Testing

Scores of marginal coloring agents—including some coaltar colors presently on the certification lists of the Food & Drug Administration—promise to become casualties of the new color additives law when it becomes fully effective in about two years. Why? Because producers will be unable to justify the expense of running the safety tests required by law on items whose volume of production is small and net return is low. This became apparent last week as more than 100 representatives of the color producing industry and its customers met for an all-day conference with officials of the FDA.

They discussed the task of satisfying the law's requirements that all substances used for coloring foods, drugs and cosmetics first be proved safe.

FDA Says It's Up to Industry

FDA has served notice that it has neither the money nor the facilities to undertake the job and that it is up to industry to shoulder most of this responsibility.

FDA has been running tests for the past five years on a number of the certified coaltar colors, using the fees that have been collected from the certification program to defray the costs of the tests.

Of the thirteen FD&C colors that have been provisionally listed under the new law for continued use in industry, FDA has completed rodent tests on all but one and has dog tests under way on all but two (red No. 3 and violet No. 1).

Arthur Schram of Allied Chemical Corporation, chairman of the Certified Color Industry Committee, urged FDA to continue the testing work on the FD&C colors until final results are obtained, using the funds of the certification program.

He thought it was industry's problem to test the colors it is seeking as substi-

—Continued on page 68

Montecatini Progressing On Broad Expansion Slate

A new organic intermediates plant, a titanium dioxide unit, and a big boost in fluorine derivative capacity head a broad slate of expansion projects announced by Montecatini, of Italy.

At a meeting in Milan last week the firm's board of directors reviewed plans for twelve current or scheduled projects and reported progress on four others.

Located at Codogno near Milan, the new intermediates plant, will turn out chemicals for varnishes and related products. On stream date: Spring, 1961.

The titanium dioxide unit is rising next to existing facilities at Spinetto Marengo, increasing production from 18,000 to 40,000 metric tons a year. Fluorine output will be tripled at the same location.

Other projects reported by the Montecatini board:

• Imminent start-up of the first pipeline in southern Italy to transport natural gas from the fields of Cellino. A major

—Continued on page 68

US RUBBER CHEMICAL CHIEF: Earle E. Ebers, named group vice-president in charge of its polymer, fiber and chemical operations by United States Rubber Company, New York.

Harshaw Is Buying Interest in Dutch Firm

To strengthen its position in the European Common Market, Harshaw Chemical Company will buy a controlling interest in one of its licensees—L. Van der Hoorn Chemische-Tecnhische Industrie NV, of Utrecht, The Netherlands.

Negotiations were completed last week for the Cleveland, Ohio, company to acquire a "substantial majority interest" in the Dutch concern. Details of the transaction were not divulged.

Van der Hoorn, a long-established sup-

—Continued on page 42

Titanium Dioxide Unit Slated for West Coast

A joint titanium dioxide operation to serve the west coast market has just been arranged by American Potash & Chemical Corporation, and a British firm, LaPorte Industries, Ltd.

American Potash will own 85 percent of the venture and 15 percent will be held by LaPorte Titanium, Ltd., a subsidiary of the British concern. The firms plan to build a $15 million titanium dioxide plant at an unnamed west coast location. Production is expected to commence in the latter part of 1962.

The facility will be built and operated

—Continued on page 37

GAF Hassle Sees Way to Settlement Cleared by Court

Another block has just been knocked out of the way towards settlement in the General Aniline & Film Corporation case, with the Supreme Court of the United States turning thumbs down on Washington's most recent move—an appeal for review of an issue involving procedures for trial of the case on its merits.

At the same time the high court let stand a lower court ruling that the issues be fought out before a special master.

Son of Celebrated Jurist Serving

William Hughes, son of the late Chief Justice Charles Evans Hughes, has been serving as a special master in this long drawn-out case since 1950. The government, while having no objection to Mr. Hughes continuing to oversee the pre-trial gathering of evidence, thought that matters of law should be passed upon by a federal judge.

The question of rightful ownership of the $100 million chemical firm and the authority of the government for seizing its controlling stock in 1942, is being challenged by Interhandel, a Swiss holding company, which has vigorously denied that its ownership of the firm was simply a cloak for German interests which were the actual owners.

A lower court decision dismissing Interhandel's claim to the company when the Swiss firm failed to produce certain banking records, which the government contended would prove that the firm was a cloak for German interests, was overturned by the Supreme Court several years ago.

The lower court is now attempting to decide the issue on the basis of the only records Interhandel said it was able to provide without violating the Swiss bank secrecy laws.

It is because the case will have to be decided on incomplete evidence that the government protested turning the entire matter over to the special master. The government told the Supreme Court that considerable evidence is being held back.

"To the extent that documentation is incomplete," the government's brief stated, "there is a correspondingly greater need for passing upon questions of testimonial credibility and a far larger role for inference." These are matters that should only be passed upon by a federal judge, it was added.

The government's appeal was without effect, however. The Supreme Court turned down the request for review without comment.

Aluminum Sulfate Plant Will Be Built by Stauffer

Stauffer Chemical Company's Consolidated Chemical Industries Division is building a liquid aluminum sulfate plant at Counce, Tenn., on a 172-acre tract adjacent to the new paper mill of Tennessee Pulp & Paper Company.

Engineering has been completed by Stauffer. Construction is now under way and the plant is scheduled to be on stream about February 1.

Chemicals: They're Not Wilmington's Everything

Taking what time could be spared from "Orlon" and "Dacron," Crawford H. Greenewalt has covered some 100,000 miles during the past ten years in pursuit of hummingbirds.

Mr. Greenewalt, an amateur photographer when he's not guiding the destiny of E. I. duPont de Nemours & Co., Wilmington, Del., found himself intrigued by the bird's vibrating flight. He began snapping pictures.

When elected a trustee of the American Museum of Natural History in 1950, the duPont president learned that the group could use a book on hummingbirds.

The compendious work, authored and photographed by Mr. Greenewalt, was published last week at $22.50.

GATT Show: Front Row Seats for Chemical Men

The chemical industry will have a seat in the front row at the upcoming round of world-wide tariff-cutting negotiations which member nations of the General Agreement on Tariffs and Trade will hold at Geneva in January.

As forecast by OPD in "Washington Talks It Over" (OPD, 9/14/60), the White House has relented and is lowering the bars against industry participation in the negotiations. It has agreed to the setting up of a "public" advisory group of twelve persons to assist the official US representatives at the tariff talks.

In addition, a larger staff of industry people will be kept on tap in Washington to serve as consultants to the Cabinet-level Trade Policy Committee and its member departments on questions arising in the course of the Geneva negotiations.

From the chemical industry's viewpoint, this is one of the most important changes in GATT procedures since congress decreed the peril-point hearings of the US Tariff Commission more than ten years ago.

For the first time it gives industry a chance to have a trained and qualified expert on chemical industry problems at the elbow of the negotiators to advise on the pitfalls in the give-and-take of actual negotiations.

Names of the industry people to aid the negotiators are now under consideration and will be announced shortly. They will be appointed by the Secretary of State upon recommendation by the Trade Policy Committee.

The public advisers will serve on a rotating basis as members of the US delegation. The plan provides that the advisers will be informed of the detailed US negotiating plans and the government will have the benefit of any comments they may have.

The consultants will be designated by Secretary of Commerce Frederick Mueller,

—Continued on page 37

Gov't Vs. the Oil Companies: It's Two Down and Three to Go

Two down and three to go. That's the way the government's case now stands against five of the nation's major oil companies. The score results from settlement of a long-standing antitrust charge against Standard Oil Company (New Jersey) and Gulf Oil Company. Final consent judgments, just entered with the US District Court in New York, enjoin the two companies from entering into any agreement or combination to fix prices, divide markets, or allocate production with any competitors.

Jersey Standard is also directed to dissolve its joint ownership of Standard Vacuum Oil Company with Socony Mobile Oil Company, a third defendant in the suit, while Gulf is required to set aside 100,000 barrels per day of its Kuwait production for the next ten years for the benefit of independent oil companies.

Litigation Started in 1953

The antitrust litigation, which grows out of an investigation by the Federal Trade Commission in 1949, was begun in 1953 by the Department of Justice. Named in the original suit along with Jersey Standard, Socony Mobile and Gulf oil were Standard Oil Company of California, and Texas Company (now Texaco, Inc.).

The five companies were jointly accused by the government of engaging in unlawful cartel operations in the international oil field, which made it virtually impossible for independents to enter into the overseas business.

Jersey Standard described the settlement as a "welcome clarification of the interpretation of the antitrust laws in their application to its foreign operations insofar as they may affect the foreign commerce of the United States."

It added that it was reorganizing its interest in the Far East, Southeast and South Asia, Australasia, and South and East Africa.

The consent judgment forbids Jersey Standard and Gulf Oil from entering into any agreements to: limit importation of crude oil or petroleum products into the

—Continued on page 43

Kaiser Is Expanding Active Alumina Output

Chemical and petroleum processors need more active alumina. So says Kaiser Aluminum & Chemical Corporation, and the company has made plans to do something about it.

At its Baton Rouge, La., alumina works, Kaiser will build a $700,000 facility to produce active alumina having a uniform spherical shape. This will bring a fivefold increase in the firm's overall alumina capacity. Completion has been scheduled for the second quarter of 1961.

The Kaiser product is said to have exceptionally large surface area, good thermal stability, high crushing strength, long life, and resistance to abrasion.

Butyl Lithium Plant: It Will Be Expansible

A butyl lithium plant, designed to grow with the needs of the market, is rising on the New Johnsonville, Tenn., property of Foote Mineral Company. Completion is expected in a few months, say reports coming out of Foote's home office in Philadelphia.

The plant will have a design capacity of 100,000 pounds of n-butyl lithium per year, expansible to twice that amount should the market demand it.

The facility has been designed so that it can produce lithium alkyls other than butyl lithium, and will augment existing semi-commercial facilities now in operation at Exton, Pa.

Butyl lithium is used as a catalyst in the synthesis of so-called "Hevea" rubber.

Polyethylene: French Aim At 51,000-Ton Mark in '61

France hopes to satisfy its internal requirements for polyethylene by the end of 1961. Despite the fact that capacity reached 17,800 tons a year in 1959, demand during the same period was about 32,000 to 33,000 metric tons.

The German trade magazine *Chemische Industrie* reports that a sharp increase in production capacity will be possible in France during the current year owing to the startup of new facilities.

Total capacity for polyethylene produc-

—Continued on page 43

Styrene Butadiene Latex Reduced 2 Cents by Dow

Reductions averaging 2 cents per pound in the price of styrene butadiene latex have been posted by Dow Chemical Company, Midland, Mich. Reductions apply across the board with the exception of some specialties.

The company said the decrease reflects lower raw material costs as well as Dow's desire to increase penetration of such markets as paint, paper, packaging and building products. The previous tankcar price for styrene butadiene latexes (solids) was 29½ cents per pound.

Toluene Terms to Change

Shell Oil Company, New York, is cancelling delivered price terms for toluene, January 1. New schedule is 25 cents a gallon, f.o.b. terminal and refinery points located at Chicago; St. Louis, Mo; Houston, Tex.; New York harbor, and Fall River, Mass. This is the first change in terms since April, 1958.

The Week's Price Changes

Caraway Oil, Copra, Cottonseed Oil, Thyme Oil Advanced. Cocoa Butter, Corn Oil, Orange Oil, Soybean Meal Reduced.

Prices Advanced

Caraway oil, 25c. per lb. (p. 56).
Copra, $2.50 per ton (p. 62).
Cottonseed oil, refd., ¼c. per lb. (p. 62).
Greases, ½c. to ¼c. per lb. (p. 62).
Choice white, ½c. per lb. (p. 62).
Tallow, inedible, ¼c. per lb. (p. 62).
Thyme oil, red, 20c. per lb. (p. 62).
White, 10c. per lb. (p. 62).

Prices Reduced

Cocoa butter, ½c. per lb. (p. 62).
Corn oil, crude, ¼c. per lb. (p. 62).
Refd., ¼c. per lb. (p. 62).
Cottonseed meal, $1.50 per ton (p. 62).
Cottonseed oil, crude, ½c. per lb. (p. 62).
Orange oil, 5c. per lb. (p. 56).
Soybean meal, $1.50 per ton (p. 62).
Tin metal, Straits, 1c. per lb. (p. 36).
Salts, ½c. to ⅝c. per lb. (p. 36).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER's relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Nov. 18, 1960	Nov. 11, 1960	Nov. 20, 1959
108.57	108.71	111.49

Paint Prices Are Due to Rise

Rising costs of raw materials are catching up with the nation's paint makers, and four industry leaders have just confirmed plans to recoup part of the damage by advancing prices at the consumer or dealer level. Sherwin-Williams Company, Cleveland, Ohio, last week announced price rises of about 3 percent on most of its paints, effective December 1. The move triggered one quick response, and when E. I. duPont & Co. moved late Friday it looked like the advances would be industry-wide.

But the real pace-setter was National Lead Company, New York, which has had price boosts averaging 3 percent in effect on its "Dutch Boy" line since October 26.

American-Marietta Company, Chicago, was quick to follow the S.-W. action, with word that prices would rise an average 3.1 percent at the dealer level December 5. Robert E. Pflaumer, president, cited labor and distribution costs, as well as higher raw material prices.

Pittsburgh Plate Ready to Move

Pittsburgh Plate Glass Company, Pittsburgh, Pa., reports its prices will probably advance, but it's not ready to disclose details. Rumors have it that the Pittsburgh, Pa., company plans to increase its extensive paint line by about 3 to 5 percent some time in December.

Speculation as to how duPont would react came to a halt on Friday when the Wilmington, Del., company said it had notified its dealers of a slate of price ad-

—Continued on page 45

IN HOOKER INT'L POST: Dr. Marion B. Geiger, appointed director of international development of Hooker Chemical Corporation, New York.

Polyvinyl Chloride Cut Is Effected by Monsanto

Monsanto Chemical Company, St. Louis, Mo., has reduced polyvinyl chloride 2 cents per pound, to 18½ cents, for delivered carload quantities.

Also coming in for reductions were the compounds of PVC. They were cut ¾-cent across the board.

Borden Chemical Company, New York, has joined the parade by lowering its PVC resins but took no action on the compounds. Several other producers are still considering the move. Trade sources feel that the lower PVC price will soon become market-wide.

Givaudan's Musk Facility Back to Work This Week

Givaudan-Delawanna, Inc., expects to have its musk nitration unit at Delawanna, N. J., back in production sometime this week.

The facility was temporarily knocked out by an explosion November 11 which slightly injured three employees. Other units at the Delawanna aromatic chemicals installation were unaffected by the blast.

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Acetylene: Not for Ivan

If acetylene technology is the backbone of modern chemical production, the Russian industry is going to have a hard time getting on its feet.

In the US, about 80 percent of acetylene output becomes organic chemicals, plastics and synthetic rubber. In Russia, a full 50 percent of it still goes into such humble applications as welding and cutting.

Because of a lack of originality and chauvinistic bias, the Russian chemist just isn't keeping abreast of Western advances in this field.

These are the sanguine conclusions arising out of a report made available last week by an unnamed US government unit. It was probably the Central Intelligence Agency. The document was made public by the Office of Technical Services of the Department of Commerce.

The Russians, according to the report, are reluctant to learn and supply modern chemical structures and reaction theory, one reason being a tendency to adhere to a Soviet-developed idea even when it may have become outmoded.

"Soviet chemists in the acetylene field are synthesizing a multitude of compounds without appreciably increasing the degree of sophistication of their knowledge of acetylene chemistry," the report states.

"Because of the backwardness of the USSR in fully exploiting the conversion of their vast stores of oil and natural gas through the acetylene route," it goes on to say, "Soviet progress in plastics, drugs, synthetic rubber, adhesives and chemical intermediates will be retarded."

At the present rate of development, the report estimates, Soviet research capability in this field will probably show only a slight increase by 1963, and the Russians will continue to depend on technology de-

—*Continued on page 37*

Rosin Prices Set for Leveling Off, But Turpentine Is Another Story

The rising trend in rosin prices, reaching a record high in October at 70 percent above those of the comparable time last year and more than twice those of two years before, will be leveling off within the next few months. Why? Because science is intensifying research to develop new and improved rosin substitutes. So report economists of the Department of Agriculture in the 1961 outlook issue of the "Price and Demand Situation," made public last week during the thirty-eighth annual National Agricultural Outlook Conference.

GEN'L DYESTUFF MARKETING BOSS: H. Alison Webb, elevated from sales manager to director of marketing of the General Dyestuff Company, a division of General Aniline & Film Corporation, New York.

For turpentine prices, it is another story. Listings of this product in 1960 are the lowest in nearly eleven years, mainly because of reduced industrial utilization of turpentine, the economists say.

Unless new uses are developed by research now in progress, they add, turpentine prices in the 1961 crop year are unlikely to increase.

The economists also have this to say about the naval stores picture:

"The increase in rosin prices has resulted from low supplies. Although rosin production in the 1960 crop year is expected to be up about 6 percent from 1959

—*Continued on page 47*

DuPont, Jap Concern In Rubber Enterprise

E. I. duPont de Nemours & Co., of Wilmington, Del., has a new partner—Showa Denko K.K., of Tokyo, Japan. The partners are organizing a new company, Showa Neoprene K.K., which will manufacture and sell neoprene synthetic rubber.

Both companies will contribute capital to the new corporation. DuPont will also contribute process information and consulting services for the design and construction of the 18-million pounds-a-year plant and for the training of personnel for its operation.

Showa Denko, one of the largest chemical companies in Japan, will contribute extensive experience in Japanese manufacturing and personnel to staff the new company.

It is anticipated that the plant will be located in Kawasaki at a site adjacent to an existing Showa Denko facility, and construction will start promptly to complete the plant as soon as possible.

Approval has been granted by the Japanese government for the company in which the stock will be owned equally by Showa Denko and duPont.

A new Far Eastern divsion has been

—*Continued on page 52*

Nopco Breaks Ground For Urethane Foam Unit

Ground has just been broken at Chattanooga, Tenn., by Nopco Chemical Company for a new modern polyether urethane foam plant.

In a related move to strengthen its urethane foam position, the Newark, N. J., company recently announced plans to construct a plant in New Jersey for production of isocyanates. The major item will be toluene diisocyanate (TDI), a basic raw material for urethane foams.

Tariff Code for Chemical Men, All Streamlined and Logical, Is Up for Congressional Okay

Chemical producers and importers are to have a new streamlined tariff structure that spells out the application of rates and classifications in precise terms, and in logical arrangements and terminology more in line with present-day operations of the industry. The Tariff Commission, which six years ago took on the mammoth task of reclassifying the tariff code, has completed its job. Last week it turned over the results of its work to congress.

Existing rates remain practically unchanged in the ten volume report submitted to the senate and house committees for approval next year, but the chemical industry was able to chalk up one major improvement in the law's structure.

'Basket Clauses' in Disfavor

Wherever feasible, the commission has done away with an old bugaboo of the industry—the so-called "basket clauses" into which chemical products are dropped when no other provision of law seems applicable.

Paragraph 5 of the 1930 tariff act is a classic example. It states: "All chemical elements, all chemical salts and compounds, all medicinal preparations, and all combinations and mixtures of any of the foregoing, all the foregoing obtained naturally or artificially and not specially provided for..."

The commission has recommended to congress that instead of this all-embracing language, the items intended to be covered be listed specifically. It named 137.

The tariff act of 1930, which is proposed to be replaced by the reclassification study of the commission, is composed of fifteen schedules of dutiable list articles, one schedule (16) of free-list articles and a number of provisions of law which, although not incorporated in the schedules of the tariff act, are nonetheless part of the existing tariff structure.

The new system devised by the Tariff Commission would replace all this with eight schedules. Each of the schedules is, in turn, divided into parts and subparts.

Provisions of general application which are presently scattered throughout the

—*Continued on page 64*

Drugs Sometimes Mix With Butter and Eggs

Sometimes butter and eggs will mix with drugs and sometimes they won't.

Last week, the country's third largest supermarket, Kroger Company, Cincinnati, Ohio, went into the drug store chain field. It bought up Sav-On Drugs, Inc., a seven unit chain based in Plainfield. N. J., and got Sav-On's president, James P. Herring, as part of the package. Mr. Herring will become a Kroger vice-president.

At the same time, another big butter and egg dealer, Daitch Crystal Dairies, Inc., of New York, reported it could not find the right prescription for a deal with United Whelan Corporation, east coast drug chain.

Daitch has ninety food stores; Whelan 120 drug stores—but they did not have enough in common.

Herbicide Is Latest In Dow's Retail Push

Dow Chemical Company, in a drive to increase its share of the consumer market, is introducing its first product tailored for home lawn care—a crab grass herbicide. Until now, Dow's agricultural products have gone only to farm and industrial markets.

A spokesman for the Midland, Mich., company suggests that this may be only the first in a complete line of lawn and garden products.

Following four years of performance

—*Continued on page 52*

Rubber Chemical Venture Being Set Up in Argentina

A joint venture to produce rubber chemicals in Argentina is being set up by B. F. Goodrich Chemical Company, Cleveland, Ohio, and R. T. Vanderbilt Company, New York. The firms will be associated with Atanor SAM in producing accelerators, antioxidants and related chemicals at a location in the vicinity of Buenos Aires.

The two American partners have been associated for many years in the distribution of rubber chemicals.

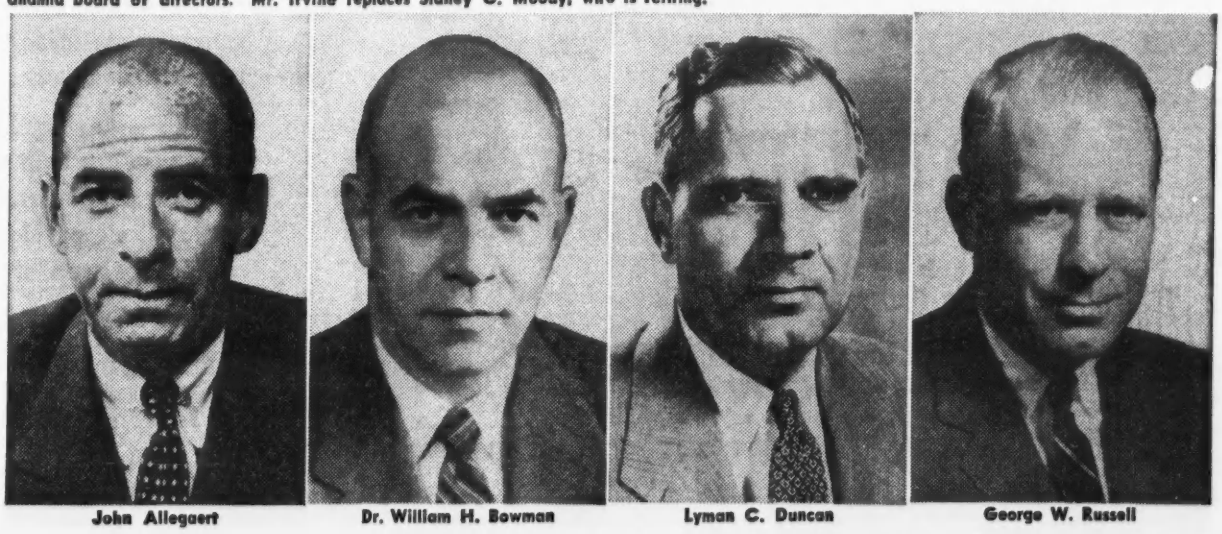
The facilities planned will be capable of handling Argentina's present and projected needs, including the requirements of a new synthetic rubber plant slated for construction there.

Chemcell Stepping Up Pentaerythritol Output

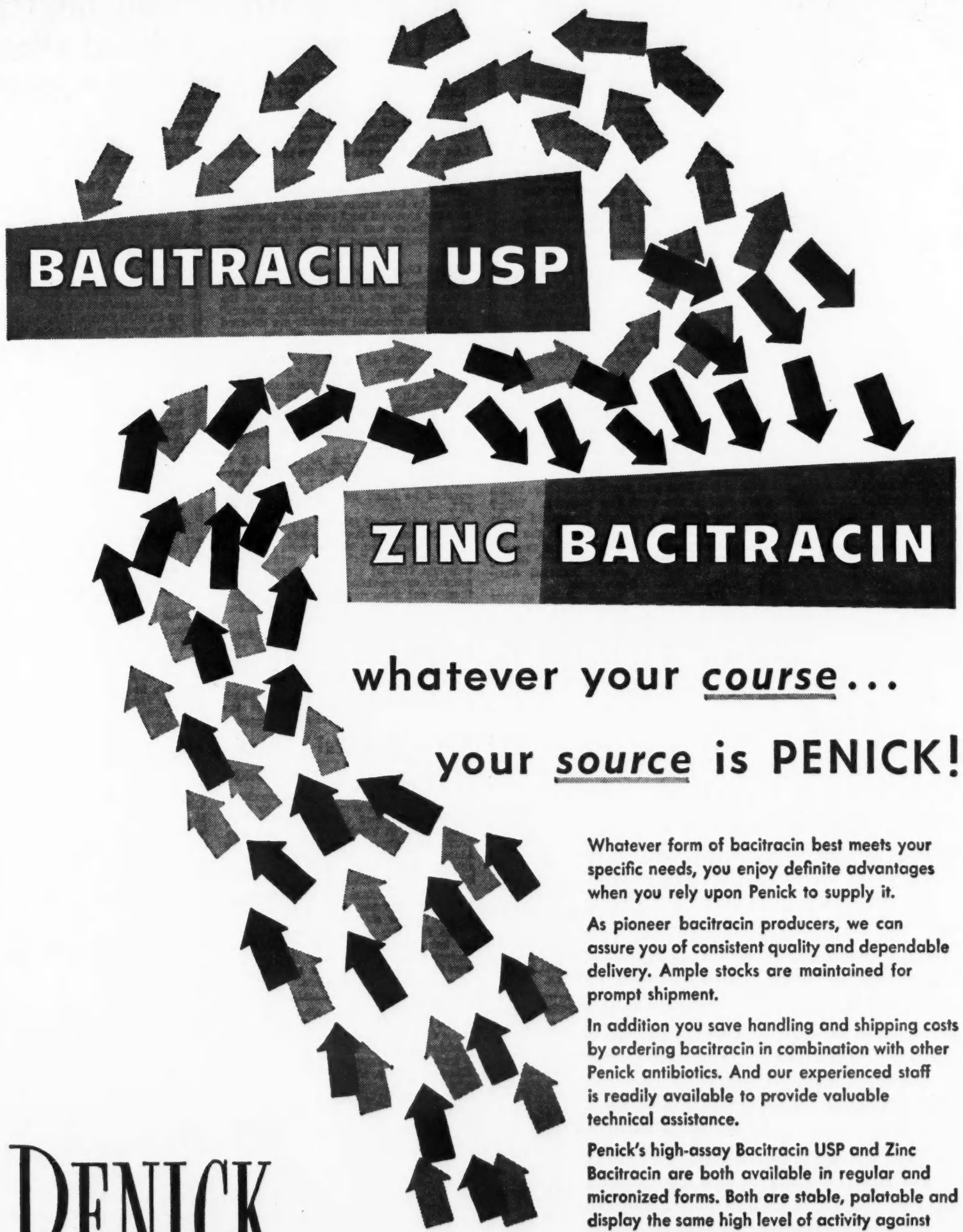
Canadian Chemical Company is under way on a 20 percent expansion of pentaerythritol capacity at its Edmonton, Ont., plant. The new facilities are scheduled to be on stream in December.

Chemcell's pentaerythritol, marketed through Celanese Corporation of America's world-wide sales organization, is used in surface coatings, resins, rosin esters, and modified drying oils. Both pure and technical grades are offered, the latter as crystals or pellets.

CYANAMID GETS NEW VICE-PRESIDENTS FOR OPERATIONAL POSTS: American Cyanamid Company, New York, has just given officer rank to several of its top men, including John Allegaert, who will continue as general manager of the pigments division; Dr. William H. Bowman, general manager of the organic chemicals division; Lyman C. Duncan, general manager of the Lederle Laboratories Division, and George W. Russell, general manager of the industrial chemicals division. The company has also named Daniel J. O'Conor, Jr., president of its Formica Corporation subsidiary, to a vice-presidency. At the same time, Ralstone R. Irvine, a New York lawyer, has been elected to a place on the Cyanamid board of directors. Mr. Irvine replaces Sidney C. Moody, who is retiring.



John Allegaert — Dr. William H. Bowman — Lyman C. Duncan — George W. Russell



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Penick's high-assay Bacitracin USP and Zinc Bacitracin are both available in regular and micronized forms. Both are stable, palatable and display the same high level of activity against a wide spectrum of Gram-positive organisms.

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LOS ANGELES SAN FRANCISCO PORTLAND, ORE.

DOW CHEMICAL MANAGER: John M. Henske, promoted from manager of product services for its Midland Division to manager of its chemicals department by Dow Chemical Company, Midland, Mich.

Grace Coming Out With 'Metal' Fertilizer

W. R. Grace & Co. expects to beef up its share of the fertilizer market with a brand new magnesium ammonium phosphate plant food that will not burn or injure roots or foliage.

Development of the metal-containing fertilizer and the start-up of semi-commercial production have just been announced simultaneously by the New York company.

The metal content of this plant food is said to cause a slower release of nutrients and to prevent burning. Under laboratory conditions, Grace's research division found that seeds could germinate and plants grow in the compound without the presence of soil.

Magnesium ammonium phosphate is especially adaptable to tree seedlings, turf, citrus fruits, shrubbery, ornamental plants, and truck farm crops, the company says.

A second metal compound, ferrous ammonium phosphate, is primarily recommended at this time for use in nursery beds, although Grace has found it equally effective in some forestry applications.

Although magnesium ammonium phosphate is now priced slightly higher than conventional fertilizers, Grace says that because of controlled nutrient release, larger and fewer applications can be made, at a considerable saving in time and labor.

Antara Plans to Offer Commercial Butanediol

Butanediol will soon be available in commercial quantities and at sharply reduced prices from Antara Chemicals, a division of General Aniline & Film Corporation, New York. The material will be offered in tankcars, in two grades—technical and purified.

A new catalytic reduction process makes it feasible to start production of this olefinic glycol on a commercial scale, Antara says. First shipments are expected around the turn of the year.

OPD Reports From Europe

British Chemical Producers Worrying About Over-Capacity, Costs, Foreign Competition

Scratch the surface of a British chemical company executive's thought these days and you'll find some concerns that have a decidedly American ring: over-capacity, rising costs, foreign competition at home and a tougher fight for the export markets that are all-important to the British economy. Chemical companies in the United Kingdom are right in the middle of a plant building spree and projects currently in the works are estimated to represent a total investment on the order of $560 million.

But there are plenty of signs that some of this expansion is leading to worrisome over-capacity problems, particularly when the domestic and world markets aren't running at all-out boom levels.

Specific Over-Capacity Fears

Over-capacity fears in Britain tend to concentrate on ammonia, acrylonitrile, benzene, phenol, phthalic anhydride, maleic anhydride, ethylene glycol and polyethylene.

Expansion of capacity in these chemicals is partly a reflection of the petrochemical boom in Britain, for almost every refinery in the UK now has a bustling petrochemical facility associated with it.

One result of this aggressive entry of oil firms into the chemical business is that Royal Dutch Shell's operation is now rated second or third in Britain behind Imperial Chemical Industries, Ltd., with sales of about $600 million to ICI's $1.5 billion.

These over-capacity worries become more serious in the light of general concerns about the prospect for business next year and the near certainty that costs for British chemical companies will rise an average 5 percent with no sign that prices—and particularly export prices—will do anything but drift lower.

Many British chemical companies reporting record sales and earnings for the first six months of this year have turned cautious about the second half and even more cautious about 1961.

Most economists in Europe agree that the British and continental economies reached a peak of growth in the first quarter of this year and have slowed since. Common Market statisticians in Brussels support this point of view, pointing out that the rate of industrial production growth in the second quarter was less than the

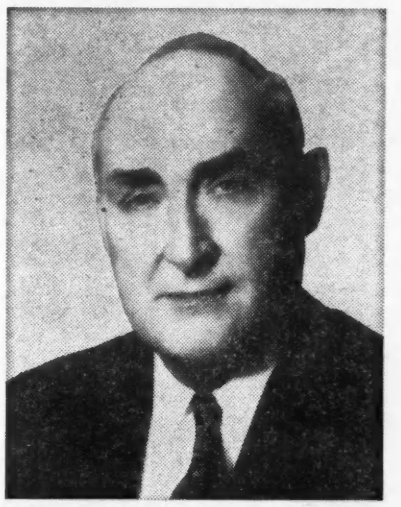
—Continued on page 47

Naugatuck Chemical Gets A New General Manager

A new general manager has been appointed to head up the Naugatuck Chemical division of the United States Rubber Company. He is Dudley Chittenden, who has also been made a US Rubber vice-president.

Mr. Chittenden succeeds Earle S. Ebers, who has been named a group vice-president of the rubber company in charge of its polymer, fiber and chemical operations (see picture story on page 3).

The new Naugatuck general manager joined US Rubber in 1926, was assigned to the chemical division in 1941, and, since 1958, has been manager of "Marvinol" vinyl operations.



PERKIN MEDALIST: Dr. Carl F. Prutton, who retired in June as executive vice-president in charge of Food Machinery & Chemical Corporation's chemical divisions, will receive the Perkin medal of the American section of the Society of Chemical Industry February 3 in New York.

Chemicals, Farms: Just Like a See-Saw

Fewer farms but more farm chemicals. That's the see-saw outlook for the next five years as depicted by leading farm economists and regional representatives at a meeting in the nation's Capital last week.

With greater specialization and further advances in technology, farmers will substantially increase consumption of feeds, pesticides and petroleum products, said one report.

Prepared by the government's Agricultural Research Service, the report predicted a rise for these products of as

—Continued on page 64

Corn Starch From France Under Antidumping Probe

Bureau of Customs is making an investigation of imports of corn starch from France to determine whether the antidumping law is being violated.

Customs officers have been instructed to withhold appraisal of further entries of corn starch from France pending results of the investigation.

SAACI's Clinic Maps New Roads For the Salesman

If the days of mushrooming growth are over, where do we go from here? And just what does the new, mature status of the chemical industry mean to that all-important member of the company team—the chemical salesman?

Kicking off a panel discussion of the Salesmen's Association of the American Chemical Industry in New York last week, William Sessions, of Monsanto Chemical Company, asked the questions and suggested some preliminary answers. The strategy of product planning has become more critical, he said. So have the risks of market research and product development.

Contact the Key to Success

Thus, effective contact between the men in charge of these activities and the salesman holds out the key to success in today's competitive market, he declared.

"More than ever before," said Mr. Sessions, "the chemical salesmen, to be successful, must be supplied with quality products to sell, competitive pricing, excellent deliveries and strong home-office backup. More, surely, is going to be demanded both of the salesman in the field and all of the technical and administrative supporting forces behind him."

Such, the speaker said, should be the industry's response to rising costs, excess domestic production capacity, pressure from overseas producers, and increasing competition from firms branching into the chemical field.

Pointing up the need for market development, he noted signs of overcapacity in such major products as polyvinyl chloride, ethylene glycol, polyethylene, phthalic anhydride, phenol, ammonia, formaldehyde, benzene, acrylonitrile and maleic anhydride.

"Instead of the soaring sixties," declared panelist J. K. Marshall, of Union Carbide Chemicals Company, "we have the 'Snoring Sixties,' with lower profits, disappointing gross national product, the same standards of living and problems of securing money enough to buy a pot to put the chicken in."

But he wasn't as pessimistic as all that.

—Continued on page 44

FDA Probe Comments Coming Up in December

The final report of the Kendall committee, which has been investigating Food & Drug Administration as a result of charges leveled against the agency at the Kefauver drug hearings, is expected to be submitted to Secretary of Health, Education & Welfare Arthur Flemming during the first week of December.

Mr. Flemming says he plans to make the report public along with his comments on its recommendations.

The investigating group, headed by Charles H. Kendall of the Office of Civil & Defense Services Administration, exonerated the employes of FDA of any conflict of financial interests in a progress report earlier this month (OPD, 11/7/60).

The committee is now considering matters concerning the integrity of FDA employees and has promised to come up with recommendations for organization or procedural improvements.

Association Meetings

American Association for the Advancement of Science, annual meeting, Philadelphia, December 26-31.

American Chemical Society, national meeting, St. Louis, Mo., March 21-30.

American Institute of Chemical Engineers, Statler-Hilton hotel, Washington, D. C., December 4-7.

American Medical Association, committee on cosmetics, Chicago, December 29.

Association of American Soap & Glycerine Producers, annual meeting, Waldorf-Astoria hotel, New York, January 25-27.

Atomic Industrial Forum, annual conference, Fairmont hotel, San Francisco, December 14-16.

Chemical Buyers Group of the National Association of Purchasing Agents, midwinter conference, Commodore hotel, New York, February 2.

Chemical Specialties Manufacturers Association, annual meeting, Hollywood Beach hotel, Hollywood, Fla., December 5-7.

Drug, Chemical & Allied Trades Association, annual banquet, Waldorf-Astoria hotel, New York, March 2.

Flavoring Extract Manufacturers Association, annual meeting, Savoy-Hilton hotel, New York, May 14-17.

Food Law Institute—Food & Drug Administration, annual conference, Washington, D. C., November 28-29.

Manufacturing Chemists' Association, semi-annual meeting and midyear conference, Statler-Hilton hotel, New York, November 22.

National Drug Trade Conference, annual meeting, Gramercy Park hotel, New York, December 16.

Northeastern Weed Control Conference, annual meeting, New Yorker hotel, New York, January 4-6.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 12-14; central regional meeting, Edgewater Beach hotel, Chicago, February 13-15; western regional meeting, Ambassador hotel, Los Angeles, February 20-21; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 30-May 3.

Plastics Exposition, sponsored by the Society of the Plastics Industry, Coliseum, New York, June 5-9.

Science & Food Symposium, sponsored by the Food Protection Committee of the National Academy of Sciences-National Research Council, Statler-Hilton hotel, Washington, D. C., December 8.

Society of Cosmetic Chemists, annual meeting, Biltmore hotel, New York, November 29.

Society of the Plastics Industry, reinforced plastics conference, Edgewater Beach hotel, Chicago, February 7-9; western section conference, del Coronado hotel, Coronado, Calif., April 20-21; national conference, Commodore hotel, New York, June 5-9.

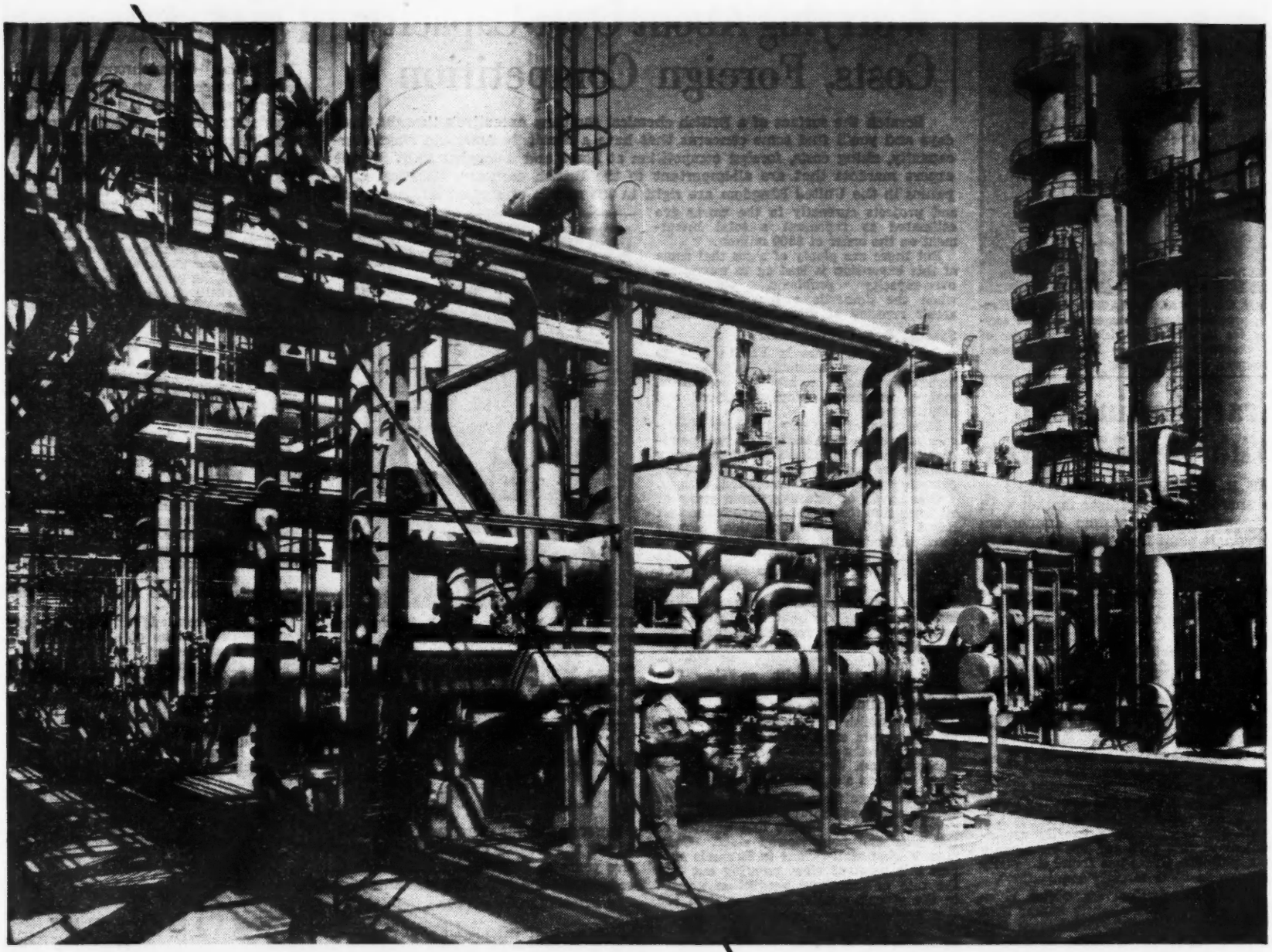
Synthetic Organic Chemical Manufacturers Association, annual meeting, Roosevelt hotel, New York, December 8.

Technical Association of the Pulp & Paper Industry, annual meeting, Commodore hotel, New York, February 20-23.

Toilet Goods Association, scientific section's winter meeting, Waldorf-Astoria hotel, New York, November 30; annual convention, Waldorf-Astoria hotel, New York, May 9-11.

Water Pollution National Conference, sponsored by the Department of Health, Education & Welfare, Sheraton-Park hotel, Washington, D. C., December 12-14.

Important Quality Improvements in *Petro-Tex n-BUTENE-1*



Deliberate removal of undesirable olefins from our commercial production of Petro-Tex n-Butene-1 has resulted in a very substantial quality improvement over the past two years.

Our specifications guarantee a minimum purity of 95% Butene-1, maximum water content of 100 ppm *and no butadiene whatsoever.* But a typical analysis of our commercial production as shipped is: Butene-1 *98.0%;* Isobutylene *0.6%;* Butene-2 *0.8%;* n-Butane *0.6%* and water 20 ppm. In most chemical reactions, these impurities are not detrimental.

Petro-Tex n-Butene-1 is now being used by important linear olefin polymer producers. As a highly reactive alphaolefin, it undergoes a wide range of oxidation, hydration, alkylation and oxo-process reactions which commend study of its use for n-butyl alcohol, butylene oxides as well as various copolymers and petrochemicals.

We invite inquiries on Petro-Tex n-Butene-1 and

n-BUTENE-2 **ISOBUTYLENE**

BUTADIENE **DIISOBUTYLENE** **TRIISOBUTYLENE**

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, November 18 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde 99% dms., c.l., works. lb. .12 - —
dms., t.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs. ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, coml., or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs 10.45 - —
Acetic acid glacial, syn., CP, dms., dlvd. 100 lbs. 15.00 -20.25
tech., dms., c.l. dlvd ..... 100 lbs. 13.75 —
dms., l.c.l., dlvd ..... 100 lbs. 15.25 - —
tanks, dlvd ..... 100 lbs. 10.00 —
USP, dms., dlvd ..... 100 lbs. 13.00 -18.25
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd E ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib dms., l.c.l., dlvd ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., l., dlvd ..... lb. — —
fib. dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluide, tech. dms., c.... dlvd lb. .82 - —
fib dms., l.c.l. dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd.. lb. .10½- —
dms., l.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., t.l., dlvd lb. .35 - —
dms., l.c.l. dlvd ..... lb. .36½- .37
tanks. dlvd ..... lb. .32 - —
Acetophenetidin, USP, 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb dms. 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .47 - —
dms., l.c.l., works ..... lb. .47¾- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.24 - —
dms., 5,000-lb lots, same basis lb. 1.30 - 1.45
dms., smaller lots, same basis lb. 1.35 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 - —
cs., l.c.l., ex whse ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd. (80 mesh), 250-lb. dms., c.l., pt. of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb. higher.)
Freight equald. shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms. c.l., frt. alld. E. of Denver lb. .35¼- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .36½- —
tanks. frt. alld. E. of Denver. lb. .33 - —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS
Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .36 - —
dms., l.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., t.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. .42½- —
dms., l.c.l., t.t.l., dlvd ..... lb. .43½- —
tanks, dlvd ..... lb. .40 - —
tech., esterification, dms., t.l., frt. prepaid lb. .41½- —
tanks, same basis ..... lb. .39 - —
tech., polymerization, dms., t.l., f.o.b shipping point lb. .42½- —
tanks, same basis ..... lb. .40 - —
Acryloni:rile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., t.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd ..... lb. .32¼- —
bgs., l.c.l., dlvd ..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.75 - 3.00
powd., 30 mesh., fib. dms lb 2.40 - —
dl-Alanine, dms., 100-lbs or more, f.o.b works lb. 5.25 - —
dms., 1-99 lbs., same basis .. lb. 10.00 - —
Aldol, 95%, dms., t.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd lb. .99 - —
fib. dms., t.c.l. dlvd ..... lb. 1.04 - —

ALCOHOLS
Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb. 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E of Rockies lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90%, dms., frt. alld lb. 28.80 - 38.90
Soln., 20%, dms., 200-2,000 lb lots, frt. alld lb. 6.50 6.55
2½% dms frt alld. ..... lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd..... lb. .32½- —
dms., t.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs or more, works lb. 1.50 - —
55-lb cbys., 1,045 to 4,950 lbs works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs works lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd lb. .17½- —
dms., t.c.l., dlvd ..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil nat., bitter, f.p.a., bots. lb 2.75 3.45
NF, bots. ..... lb 3.00 3.30
sweet, USP, cns., dms .... lb. .70 1.30

Abbreviations
Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
a.p.a.	available phosphoric acid	e.p.	end point	Pac.	Pacific
approx.	approximately	equald.	equalized	pf.	proof
artif.	artificial	exp.	expressed	phos.	phosphate
ASTM	American Society for Testing Materials	Ext.	external	photo.	photographic
		F.	fahrenheit	pkgs.	packages
Atl.	Atlantic	ferment.	fermentation	powd.	powdered
Be.	Baume	f.f.a.	free fatty acid	precip.	precipitated
bbls.	barrels	f.f.c.	free from chlorine	prod.	producer
bgs.	bags	fib.	fiber	pt.	point
bls.	bales	f.o.b.	free on board	pulv.	pulverized
bots.	bottles	f.p.a.	free of prussic acid	purif.	purified
b.p.	boiling point	frt.	freight	redist.	redistilled
b.p.l.	bone phosphate of lime	gal.	gallon	refd.	refined
b.r.	boiling range	gran.	granular	refy.	refinery
bxs.	boxes	grd.	ground	reg.	regular.
C.	centigrade	i.&a.	iron and aluminum	resub.	resublimed
cbys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured	imp.	imported	SD	specially denatured
c.i.f.	cost, insurance, freight	incl.	included	s.d.	single distilled
cks.	casks	indust.	industrial	S E.	southeast
c.l.	carlots	kgs.	kegs	sec.	secondary
cns.	cans	l-	laevo	secs.	seconds
coml.	commercial	lacq.	lacquer	s.g.	specific gravity
conc.	concentrated	lb.	pound	shipt.	shipment
CP	chemically pure	l.c.l.	less carlots	soln.	solution
cps.	centipoises	l.t.l.	less truckload	s.u.	standard unit
cryst.	crystalline	liq.	liquid	syn.	synthetic
cs.	cases	mfrs.	manufacturers	tanks.	railroad tankcars
ctns.	cartons	m-	meta	tech.	technical
cyls.	cylinders	m.a.p.	mixed aniline point	tert-	tertiary
d-	dextro	min.	minimum	t.l.	truckloads
dbl.	double	m.p.	melting point	t.w.	tankwagons
denat.	denatured	N-	nitrogen	USP	U. S. Pharmacopoeia
dest-dist.	destructively—distilled	n-	normal	vis.	viscosity
dl-	dextro-laevo	nat.	natural	VM&P	varnish makers & painters
dist.	distilled	neut	neutral	W.	west
		NF	National Formulary	whse.	warehouse
		NNR	New and Nonofficial Remedies	w.w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. 35 - .40
powd., cs. ..... lb 66 - .68
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —
Aloin, USP bbls., dms., kgs lb 4.25 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works 100 lbs 4.30 - —
Lump, dms., works .... 100 lbs 5.05 - —
Powd., dms., works ..... 100 lbs 5.20 - —
USP, burnt., dms ..... lb. .30 .31
hydrous, dms. ..... lb. .07¾ .08
Alum potassium, gran., bgs. works. 100 lbs 4.55 - —
Lump, dms., works ..... 100 lbs 5.30 - —
Powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 .21
USP, hydrous, dms ..... lb. .07¾ .08
Alum, potash-chrome, dms ..... lb. .17 —
Alumina, calcined bgs., c.l., works. lb. .0535- —
bgs., l.c.l., works ..... lb. .056 - .0635
Aluminum acetate, basic soln., 24%, bbls. l.c.l. works lb. .14 - —
Aluminum chloride coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works lb. .16½- —
cryst., dms., c.l., works 100 lbs. 21.00 - —
dms., l.c.l., works 100 lbs. 21.50 - —
Soln., 32° cbys., c.l., works .. lb. .0495- —
cbys., l.c.l., works ..... lb. .0570- .1099
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works lb. .31 - .32
Aluminum fluoride tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l., works ..... lb. .17¼- .19¼
bulk, c.l. basis 80% .... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs. 11.00 - —
containers extra, l.c.l., works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb lots same basis lb. .0395- —
bgs., 2,000-20,000 lb lots same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0330- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste lining, extra-fine, dms lb. .71 - —
Standard grade, dms lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb. dm., 1½c. per lb. for 50-lb dm. 3c. per lb. for 10 lb. can and 5c to 12c. per lb. for smaller containers. Deduct 1c per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or more
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, double ctns., c.l lb. .39 —
ctns., l.c.l. ..... lb. .40 .44
Monobasic, ctns., c.l. ..... lb. .39 —
ctns., l.c.l. ..... lb. .40 .44
Tribasic ctns., c.l. ..... lb. .39 —
ctns., l.c.l. ..... lb. .40 .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton. 41.00 - —
bulk, c.l., same basis ton. 40.00 - —
lump, bgs., c.l. same basis ton. 44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 8.30
USP, gran., 400-lb. dm., works. lb. .30 — —
USP, powd., dms., works .... lb. .27 — —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dcy., dms., works lb. 1.72 —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 2.15 - 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton. 92.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies ton. 94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton. 95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton. 325 - —
dms., ton lots, ex whse. 100 lbs. 20.40 - —
dms., smaller lots, ex whse. 100 lbs. 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works 100 lbs. 9.00 —

Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., dms., c.l. t.l. frt equald lb. .44 - —
dms. l.c.l., same basis lb. .46 - —
Ammonium carbonate USP lump, dms. c.l. lb. .15½- —
Ammonium chloride, white tech., fine gran., bgs. c.l. works, 100 lbs 6.00 - —
bgs. l.c.l., works 100 lbs 8.00 - 8.45
USP gran., 250 lb dm lb. .17¼- —
Ammonium citrate dibasic, 250-lb. dm f.o.b works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech. 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b works lb 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l. frt. alld lb. .21½- —
tanks, frt. alld lb. .19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 - —
bgs., l.c.l., works 100 lbs. 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .65
Ammonium molybdate, CP, cryst., 400 lb dms., 15,000-lbs. works. lb. 1.22 - —
400-lb. dms., 2,000-lb. contracts, works lb. 1.23 - —
400-lb. dms., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works ton.67.00 - —
Ammonium nitrate, dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.64.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb bgs., f.o.b. works lb. .08¼- —
Large granular, bulk, c.l., works ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l., t.l.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt equald., 100% basis. ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms. l.c.l., works lb. .22 - .26
Tech, soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld. E of Rockies lb. .18¼- .18..
dms., l.c.l., same basis lb. .20 - .20¼
tanks, same basis lb. .16 - .16¼
Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l. dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Amyl acetate, syn., oxo process, dms., c.l., dlvd lb. .19 - —
dms., c.l., dlvd. lb. .20½- —
tanks, dlvd lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼- —
dms., l.c.l., frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld E. lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .28¾- —
dms., l.c.l., works lb. .27¾- —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms. lb 1.55 - —
Anethol, tech., dms. lb. .80 - .92
USP, cns., dms. lb. 1.05 - —
Angelica root, bls lb .85 - .90
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l. t.l., 20,000 lbs. min., frt. alld lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb 1.75 - 3.00
Anise seed, Mexican, bgs lb. .24 - —
Spanish, bgs. lb. .24 - —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bgs., c.l., frt. alld lb. .70 - —
bbls., l.c.l., same basis lb. .73 - —
Electrical grade, bgs., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- —
bgs., l.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .23 - .25
USP, powd., bbls. lb. .27 - .34
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. 75 - —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.80.00 - —
7D, c.l. (30 tons), mines ton.75.00 - —
7F, c.l. (30 tons), mines ton.71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF, c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF, c.l. (30 tons), mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 6.80 - —
dms., less than 100-kilos kilo. 7.05 - —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 - —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy. ton.20.00 - —

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Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins ..... oz. 5.75 - 7.50
Atropine sulfate, USP, bots ..... oz. 5.25 - 5.75
Azelaic acid, bgs., c.l., dlvd. .... lb. .40 - —
bgs., ton lots, same basis ..... lb. .41 - —

B

Bacitracin, bulk, 1,000,000,000 or more units, 50,000 units, less than 1,000,000,000 units, 50,000 units. .65 - — .70 - —
Balm of Gilead buds, dried, bgs. lb. 1.25 - 1.35
Barberry root bark, bgs ..... lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs., smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton.176.00 - —
bgs., t.c.l., works ton.196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs., c.l., works, 100 lbs. 7.00 - —
bgs., t.c.l., works ..... 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs., t.c.l., t.l., frt. equald ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald. 100 lbs.11.25 - —
bgs., t.c.l., frt. equald 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd lb. .16 - —
bbls., t.c.l., t.t.l., dlvd. ..... lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald ton275.00 - —
dms., t.c.l., t.t.l., frt equald ton.285.00 - —
Barium peroxide, dms., frt. equald, lb .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., t.c.l. same basis ..... lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19 - —
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., t.c.l., works ..... ton.110.00 - —
Barytes, southern, off-color, bgs. mines ton 35.00 - —
95-75%, bgs., mines ton.30.00 - —
white, water-grd., paper bgs. c.l. St. Louis ton.60.00 -60.25
paper bgs., ex whse New York ton.84.85 - —
Battery acid, cbys., c.l., works E. 100 lbs. 2.35 - —
cbys, t.c.l., works, E ..... 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ..... ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.40 - 2.70
55-60%, cns. ..... lb. 2.55 - —
NF, West Indian, 50-55%, cns. dms lb. 2.50 - —
Bayberry wax, bgs ..... lb. .65 - .70
Beeswax, crude, African, bgs. ... lb. .54 - .55
Brazilian, bgs. ..... lb. .57 - .58
Central American, bgs. ..... lb. .53 - .54
Chilean, bgs. ..... lb. .59 Nom.
Refd. USP, bleached white, bricks, 100-lb. ctns. lb. .67 - .69
white, slabs, 100-lb. ctns. lb. .66 - .68
yellow, bricks, 100-lb. ctns lb .59 - .61
yellow, slabs, 100-lb. ctns. lb. .58 - .60
Belladonna leaf, bls. ..... lb. .24 - .26
Belladonna root, bls. ..... lb. .28 - .35
Bentonite, dom. 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse. ton.95.20 - —
bgs., 1-ton lots, ex whse. ton.99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse. ton.93.40 - —
bgs., 1-ton lots, ex whse ton.97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms. ..... lb. .80 - 1.05
Tech., dms., c.l., t.l. ..... lb. .47 - —
dms., l.c.l. ..... lb. .48 - —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La. ..... gal. .34 - —
Bethlehem, Pa. ..... gal. .34 - —
Birmingham district ..... gal. .34 - —
Chicago district ..... gal. .34 - —
Cleveland district .... gal. .34 - —
Geneva, Utah ..... gal. .34 - —
Houston, Tex. ..... gal. .34 - .40
Johnstown, Pa. ..... gal. .34 - —
Benzene, pure or nitration, tanks, works:
Lorain, Ohio ..... gal. .34 - —
Middletown, Ohio .... gal. .34 - —
Mennequa, Colo. .... gal. .34 - —
Philadelphia district... gal. .34 - —
Pittsburgh district ... gal. .34 - —
Port Arthur, Tex. .... gal. .34 - —
St. Louis, Mo. District. gal. .34 - —
Sparrows Point, Md. gal .34 - —
Syracuse, N. Y. ..... gal. .34 - —
Terre Haute, Ind. ..... gal. .34 - —
Youngstown, Ohio .... gal. .34 - —
Lackawanna, N. Y. ... gal. .34 - —
Lone Star, Tex. ..... gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., t.c.l., same basis ..... lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. ..... lb. 2.55 - —
Lightfast, bbls., dlvd. ..... lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 - .37
dms., t.t.l., same basis ..... lb. .29 - .41
tanks, same basis ..... lb. .21 - —
USP, bbls., dms., ton lots lb. .46 - —
bbls., dms., 1,000-lb lots lb. .50 - —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. ..... lb. .32 - —
Benzophenone, dms ..... lb. 1.35 - 1.40
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 1.95 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald. lb. .21 - —
cbys., smaller lots, frt. equald. lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald. lb. .22 - —
cbys., t.c.l., same basis lb. .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms. lb. .54 - —
Benzyl alcohol, NF, dms. ..... lb. .54 - —
Tech., dms., dlvd. ..... lb. .47½ - .65
Benzyl benzoate, USP, 40-lb. dms. lb. .62 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt. equald lb. .22½ - .25½
cbys., dms., t.c.l., same basis lb. .23½ - .25½
tanktrucks, dlvd. Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.
Benzyl cinnamate, cns. ..... lb. 3.30 - 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld. lb. 1.25 - —
12-49 dms., same basis ..... lb. 1.35 - —
1-11 dms., same basis ..... lb. 1.90 - —
Benzyl formate, cns. ..... lb. 1.70 - 1.85
Benzyl isoeugenol, cns. ..... lb. 8.20 - 8.30
Benzyl propionate, bots. ..... lb. 1.30 - 1.35
Benzyl salicylate, bots. ..... lb. 1.50 - 1.85
Benzylidine acetone, bots. ..... lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns. ..... lb. 56.50 - —
Berberine hydrochloride, bots. ... lb. 56.50 - —
Bergamot oil, nat., NF, Italian, cns. lb. 11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride, tech.).
Biotin, cryst. bots ..... gram. 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. ..... lb. 1.50 - 1.90
Rectified, cns. ..... lb. 1.75 - 2.00
Bismuth chloride, jars ..... lb. 5.11 - —
Bismuth hydroxide, dms. ..... lb. 4.60 - 4.65
Bismuth metal, bxs., ton lots. ... lb. 2.25 - —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.43 - —
Bismuth subcarbonate, USP, 150-lb. dm lb. 3.70 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works. lb. 3.98 - —
Bismuth subiodide, fib dms lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.15 - —
Bismuth trioxide, 100-lb. dms., f.o.b. works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½ - —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., t.c.l., same basis ..... lb. .31 - —
Blackberry root bark, bls. ..... lb. .50 - .55

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton.160.00 - —
bgs., t.c.l., works ..... ton.170.00 - —
bgs., l.c.l., New York whse. ton.215.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 5.50 - —
Bloodroot, bls. ..... lb. .85 - .90

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate).
Bois de rose oil, Brazilian, dms. lb. 2.05 - —
Peruvian, dms. ..... lb. 1.65 - —
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated, bbls. ..... lb. 1.50 - —
Bone black, dms., c.l., frt. alld. lb. .1750- .2225
t.c.l., works ..... lb. .1950- .2425
Pacific coast bone black prices 3¼c. per lb. higher.
Bonemeal, steamed works, E ton.80.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).

IS YOUR INDUSTRY LISTED HERE?

Abrasives
Aeronautical
Automotive
Brick and Tile
Ceramic
Cement and Concrete
Cosmetic
Disinfectants
Electrical Manufacturing
Electroplating
Enamel
Engraving and Electrotyping
Feed Stuff, Mineral Feed
Fertilizer
Food
Glass
Insecticide and Fungicide
Laundry
Leather
Lithographing
Linoleum and Floor Covering
Lubricant
Match
Metallurgical
Metal Working
Oil Cloth
Optical
Paint, Varnish and Lacquer
Paper
Petroleum
Pharmaceutical
Photographic
Porcelain Enamel
Plastics
Pottery
Printing Ink
Pyrotechnic
Refractories
Rubber
Shade Cloth
Soaps
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Veterinary Remedies
Welding Electrodes
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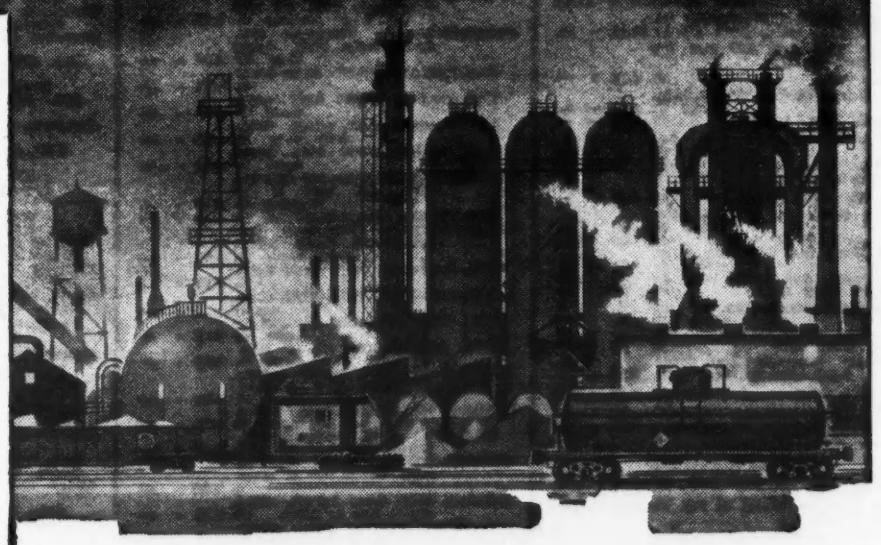

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Bone Phosphate—Chalk

Bone phosphate, precip (see Calcium phosphate tribasic)
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 4.42 - —
bgs., smaller lots same basis 100 lbs 8.67 -10.67
bulk, c.l., works ton 83.00 - —
Borax, tech., gran., decahydrate, 99½% bgs., c.l., works, ton 50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 - —
bgs., smaller lots same basis 100 lbs 6.57 8.57
bulk, c.l., works ton 43.50 - —
pentahydrate, 99½%, bgs., c.l., works ton 64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.05 - —
bgs., smaller lots same basis 100 lbs 7.30 9.30
bulk, c.l., works ton 58.00 - —
USP powd., bgs., c.l., works ton 54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.45 - —
bgs., smaller lots, same basis, 100 lbs 7.70 9.70
Bordeaux powder, tribasic bgs., c.l., dlvd lb .24 - —
bgs., l.c.l., same basis lb .26 - —
Boric acid, tech., anhyd, 99.9% bgs., c.l., works ton 335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 19.62 - —
bgs., smaller lots, same basis, 100 lbs 20.87 -22.87
cryst, 99.9% bgs., c.l., works ton 163.50 —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 11.05 - —
bgs., smaller lots, same basis, 100 lbs 12.30 -14.30
Boric acid, tech., cryst., 99.9%, dms., c.l., works ton 188.50 - —
dms., ton lots, ex whse., New York or Chicago 100 lbs 12.30 - —
bgs., smaller lots, same basis 100 lbs 13.05 - —
Boric acid, gran., 99.9%, bgs., c.l., works ton 112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 8.47 - —
bgs., smaller lots, same basis, ton 174.25 - —
dms., c.l., works ton 137.00 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs 9.72 - —
dms., smaller lots, same basis 100 lbs 10.47 - —
bulk, c.l., works ton 106.00 - —
powd., bgs., ton lots, ex whse., New York or Chicago 100 lbs 8.85 —
bgs., smaller lots, same basis 100 lbs 10.10 -12.10
Boric acid, powd., dms., smaller lots, same basis 100 lbs 11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb 1.25 - —
100-lb. cyls., works lb 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb .70 - —
cyls., l.t.l., works lb .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls lb 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd, E of Rockies lb .32 - —
cs., l.c.l., same basis lb .34 .39
ret dms., c.l., t.l., dlvd, E of Rockies lb .31 —
ret. dms., l.c.l., same basis lb .31 .34
tanks, same basis lb 21½ - —
Bromochloromethane, dms., c.l., frt. equald lb .48 - —
dms., l.c.l., same basis lb .50 - —
tanks, same basis lb .47 - —
Bromoform pharmaceutical grade, 5-gal. cby., frt. equald lb 1.95 - —
Bromstyrol, bots. lb 5.25 - 5.35
Brucine, cns oz Nominal.
Brucine sulfate, NF, cns. 1.45 1.75
Buchu leaves, bbls. lb .70 - .75

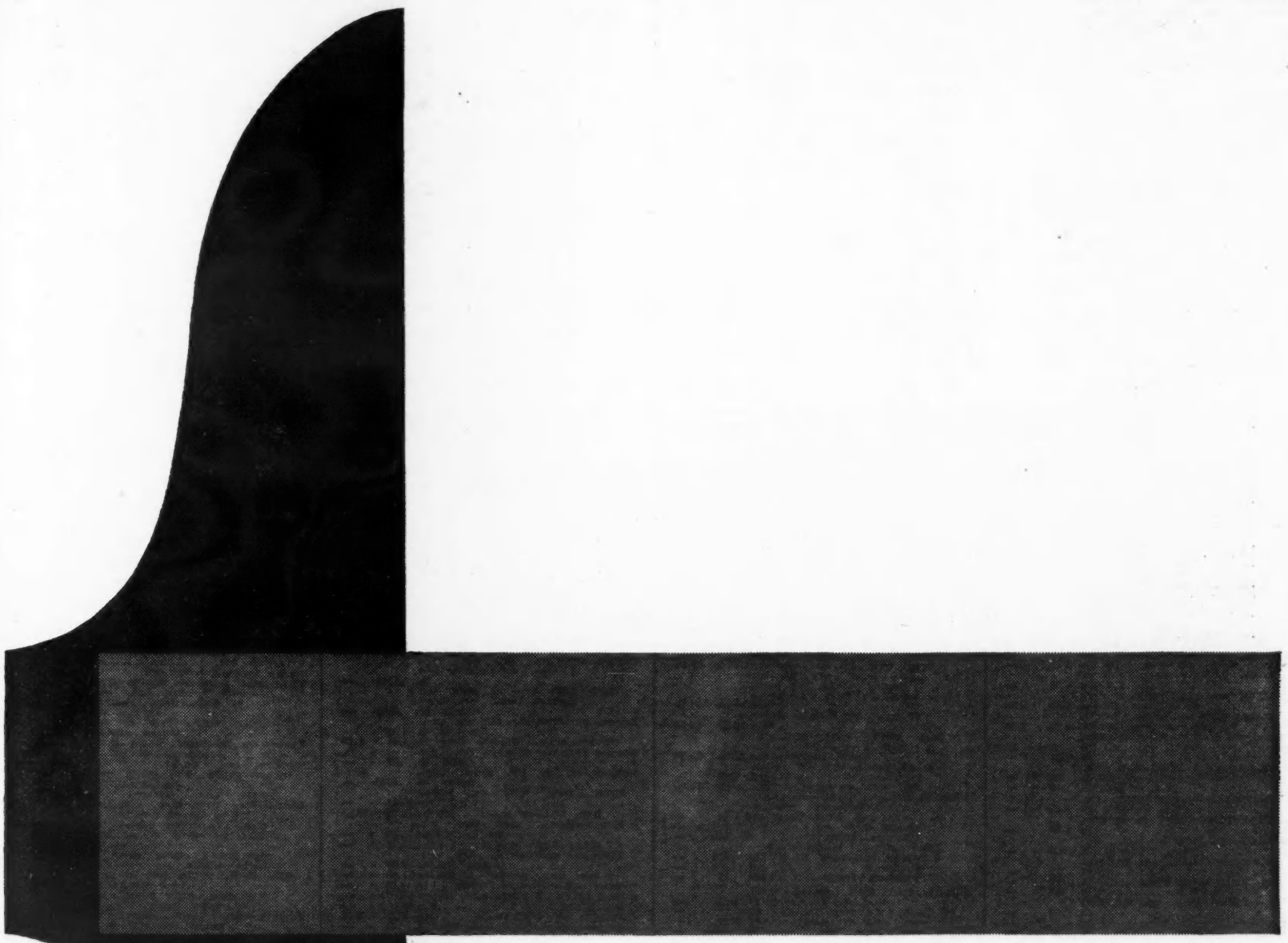
BROWN PIGMENTS

Brown pigment quotations are listed individually For example, prices on Brown, Iron oxide, may be found in the I's under Iron oxide brown.

Butadiene (std cyls., c.l., refy lb .21 —
cyls., l.c.l., refy lb .22 —
tanks, dlvd. lb .12¾ - —
Butene-1, tanks, works lb .0625 —
Butene-2, tanks, works lb .0570 —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb .17 - —
dms., l.c.l., same basis lb .18½ - —
tanks, same basis lb .14½ - —
Syn. dms., c.l., dlvd E lb .17 - —
dms., l.c.l., same basis lb .18½ - —
tanks, same basis lb .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd E lb .14¾ - —
dms., l.c.l., same basis lb .16¼ - —
tanks, same basis lb .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb .42½ - —
dms., l.t.l. same basis lb .43½ - —
tanks, same basis lb .40 - —
Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb .18 - —
dms., l.c.l., frt. alld lb .19½ - —
tanks, frt. alld. lb .15½ - —
n-Butyl alcohol, syn., dms., c.l., dlvd lb .18 - —
dms., l.c.l., frt. alld lb .19½ - —
tanks, dlvd. lb .15½ - —
Sec-synthetic, dms., c.l., dlvd lb .15 - —
dms., l.c.l., dlvd. lb .16½ - —
tanks, dlvd. lb .12½ - —
n-Butyl alcohol, tert-synthetic, dms., c.l., frt. alld., dlvd E lb .16 - —
dms., l.c.l., same basis lb .17½ - —
tanks, same basis lb .13½ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb .37½ - —
dms., l.c.l., works lb .38¼ - —
n-Butyl ether, dms., c.l., works lb .35¼ - —
dms., l.c.l., works lb .36 - —
tanks, works lb .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. Rockies lb .42½ - —
dms., l.c.l., same basis lb .43½ - —
tanks, same basis lb .40 - —
Butyl laurate, dms., works lb .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb .55 - —
dms., l.c.l., works lb .55½ - —
Butyl oleate, refd., dms., l.c.l., works lb .32 - —
Butyl phenylacetate, dms. lb 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Rockies lb .27¼ - —
dms., l.c.l., same basis lb .28¼ - —
Butylamine (see Mono-, Di- and Tributylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb .47 - —
dms., l.c.l., same basis lb .47½ - —
tc., t.t., same basis lb .45 - —
Butylated hydroxyanisole, food grade, dms., dlvd. lb 4.75 - —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol)
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol)
1,3-Butylene glycol, dms., c.l., t.l., dlvd lb .20½ - —
dms., l.c.l., t.l., f.o.b. works lb .22 - —
tanks, dlvd lb .18 - —
p-tert-Butylphenol, bgs., c.l., dlvd., lb .27½ - —
bgs., l.c.l., works lb .28½ - —
Butyraldehyde, dms., c.l., dlvd lb .22 - —
dms., l.c.l., dlvd. lb .23½ - —
tanks, dlvd lb .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb .34 —
dms., l.c.l., same basis lb .34½ - —
tanks, same basis lb .32½ - —
Butyric ether (see Ethyl butyrate)
Butyrolactone, dms., c.l., t.l., works, lb .40 - —
dms., l.c.l. same basis lb 43 - —
n-Butyronitrile, dms., c.l., dlvd lb .56½ - —
dms., l.c.l., dlvd. lb .57½ - —
tanks, dlvd. lb .54 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt. alld E of Rockies lb 5.55 - —
Light shade, bbls., same basis lb 4.65 - —
medium shade, bbls., same basis, lb 5.30 - —
Medium light shade, bbls., same basis lb 4.90 - —
Orange-red shade, bbls., same basis lb 4.30 - —
Yellow, all shades, bbls., frt. alld. E of Rockies lb 2.85 - —
Cadmium chloride, 400-lb. dms., f.o.b. shipping point lb 1.49 - —
Cadmium iodide, 25-lb fib dms in 6.75 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb 1.60 - —
Cadmium nitrate, purif, cryst., 100-lb. dms., less than 5,000 lbs., f.o.b. shipping point, lb .89 - —
400-lb. dms., 5,000 lbs. or more, same basis lb .87 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E of Rockies lb 1.65 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb 1.95 - —
Red, light shade bbls. same basis, lb 1.72 - —
Red, medium shade bbls., same basis lb 1.87 - —
Red, medium light shade bbls., same basis lb 1.80 - —
Red, maroon shade, bbls., same basis lb 2.03 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld E of Rockies lb 2.76 - —
Orange, bbls., same basis lb 1.58 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb 1.72 - —
Red, dark shade bbls. same basis, lb 2.56 - —
Red, light shade, bbls., same basis, lb 1.88 - —
Red, medium shade, bbls., same basis lb 2.00 - —
Red, medium-light shade bbls., same basis lb 2.23 - —
Cadmium-selenide, lithopone, yellow, all shades bbls frt alld. E of Rockies lb 1.19 - —
Caffeine, NF, citrated, dms, 100-lb. lots or more lb 2.70 - —
USP, nat., cryst anhyd., dms., 100-lb lots or more lb 2.10 - —
Caffeine, USP nat., cryst. hydrous, dms, 100-lb lots or more, lb 1.96 - —
Caffeine, USP, syn., anhyd., dms., 100-lb. lots or more lb 2.10 - —
cryst. hydrous dms, 100-lb lots or more lb 1.96 —
Cajuput oil, native cns. lb 1.75 2.00
Redist. USP cns lb 1.90 2.10
Calamine USP dms. lb .34 —
Calamus oil bots lb 12.00 20.00
Calciferol, cryst., 10-kilo or more lots, works gram .54 —
1-10 kilo lots gram .55 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib dms. 100 lbs or more frt adjusted lb 3.10 - —
Calcium bromide NF jars 100 lbs. or more lb 1.10 - —
Calcium carbide standard generator size, 600-lb dms. c.l., dlvd ton 149.00 - —
Calcium carbonate, nat., dry grd., air floated, 325 mesh, bgs. c.l. works ton 10.50 - —
Calcium carbonate, chalk, whiting, 325 mesh, bgs c.l. works ton 32.00 -34.00
water-grd. ½ to 10 microns, bgs., c.l. works ton 30.00 —
10 to 20 microns bgs., c.l. works ton 17.00 -18.00
precip., dense bgs. c.l. works ton 30.00 -38.50
bgs. l.c.l., works ton 45.00 -53.50
medium bgs. c.l., works ton 38.00 —
bgs., l.c.l works ton 48.00 -53.00
Calcium carbonate, surface treated, bgs., c.l., works ton 42.00 -44.00
bgs., l.c.l., works ton 57.00 59.00
ultrafine bgs., c.l., works ton 117.50 167.50
bgs. l.c.l. works ton 137.50 -187.50
Calcium chloride anhyd. flake or pellet 94-97% paper bgs., c.l., works, frt equald ton 39.30 - —
Flake, 77-80%, paper bgs., c.l., works, frt equald ton 32.00 - —
Liquor, 40%, tanks, frt equald ton 12.50 - —
Powd., 77% min., paper bgs. c.l., works, frt equald ton 37.00 - —
Purif., gran dms lb .27 —
Calcium chloride solid, 73-75%, dms., c.l., frt equald ton 29.50 - —
dms., l.c.l. works frt equald ton 36.00 -73.00
USP, gran., dms. lb .32 —
Calcium chromate, bgs., dlvd lb .37 - —
Calcium cyanide dms., c.l. dlvd E. of Rockies lb .20 —
dms., l.c.l., same basis lb .24 .55
Calcium cyclamate, 100-lb. dms lb 1.95 —
Calcium gluconate, USP, AA grade, 100-lb dm., ton lb. 73½ - —
USP, powd., 100-lb dm. ton lb. .66½ - —
Calcium hydride lump, dms, works, lb 2.20 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd E. of Rockies cs 23.85 -25.60
100-lb dms. same basis dm 33.30 -36.55
Calcium hypophosphite, dms, 1,000-lb lots lb 1.28 - —
Calcium iodide, 25-lb. jars, works, lb 4.27 - —
Calcium lactate NF, dms., f.o.b. works lb .43 - .46
Calcium mandelate, USP, 150-lb. dm., works lb 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb 1.24 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs. 16.00 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton 86.00 - —
bgs. c.l. t.l., f.o.b Texas City works ton 80.50 - —
bgs. l.c.l. frt equald ton 96.00 - —
Calcium phosphate, dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald ton 97.65 - —
bgs., l.c.l. frt equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs. c.l. prices.
Calcium phosphate, monobasic, bgs., 10,000-lb lots, frt equald, 100 lbs. 7.45 - —
bgs., smaller lots. same basis, 100 lbs. 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms., dlvd E. of Rockies, lb .34½ - —
Prices W of Rockies 3c. per lb. more.
Calcium phytate bgs., 50 lbs. or more f.o.b. warehouse N Y lb. .39 - —
Calcium resinate, precip., dms., frt, alld., works lb. .45 - —
Calcium silicate hydrated, bgs., c.l., works lb. .06 —
bgs., l.c.l., works lb. .06½ - —
Calcium silicate paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calomel, NF mild, powd., dms., 100-lbs., f.o.b works lb 4.32 - —
NF, mild, precip., dms., 100-lbs., f.o.b works lb. 5.67 - —
Camphene, 46° m.p., dms incl., c.l., works lb. .15 —
dms. incl., l.c.l. same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Camphene chlorinated, 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb. 3.63 3.70
Nat. USP powd. cs., 100-lb. lots, lb. .60 .65
tablets, 1-oz. cs. lb. .85 .90
Nat. USP gran., bbls., 2,000-lb lots lb. .59 - —
Camphor, syn., tech., 1 bbl. or more, lb. .48 - —
USP, gran., powd., bbls., 1,000-lb. lots lb. .58 - —
bbls., smaller lots lb. .59 - —
tablets, ctns., 1,000-lb. lots, lb. .80 - —
ctns., 500-lb. lots lb. .81 - —
ctns., smaller lots lb. .82 - —
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 .50
Cananga oil, native, cns. lb. 5.00 6.50
Rectified, cns lb 7.25 -10.00
Candelilla wax, crude, bgs lb. .55 - .56
Refd., pure, bgs lb. .60 - .62
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. lb. 1.00 - —
powd., bgs. lb. 1.15 - —
Russian, bgs. lb 2.00 2.15
powd., bgs. lb 2.15 2.30
Capric acid, dms lb. .29¼ - .31¾
tanks lb. 26¾ - —
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., t.l., same basis lb. .57 - —
tanks, same basis lb. .49 - —
Capryl alcohol, 85% dms., c.l., t.l., works lb. .19 - —
dms., t.l., same basis lb. .19½ - —
tanks, frt. equald. lb. .16½ - —
Sec., 92-99% dms., c.l., f.o.b. works lb. .22 - —
dms., l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b works lb. .19½ - —
Caprylic acid, dms lb. .29¼ - .31¾
tanks lb. 26¾ - —
Capsicum (see Pepper red)
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms lb. 3.75 - —
Caraway seed, Danish, bgs. lb .16 —
Dutch, bgs. lb. .18 - —
Polish, bgs lb. .17¼ - —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, cubber heads, bulk, c.l., works lb. .08 - —
bgs. c.l., works lb. .08½ - —
bgs., l.c.l. works lb. .16¼ - —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .06¾ - —
ctns., l.c.l., whse lb. .13½ - —
Carbon black high abrasion, bulk, c.l., works lb. .07¼ - —
bgs., c.l., works lb. .07¾ - —
bgs. l.c.l., dlvd or whse lb. .14½ - —
high modulus, bgs., c.l., works, lb. .06¼ - —
ctns. l.c.l., whse. lb. .13 - —
semi-reinforcing, bgs., c.l., works lb. .05¾ - —
bgs., ctns., l.c.l., whse lb. .12½ - —
pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l. dlvd or whse lb. .22½ - —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton 60.00 -115.00
bulk, 3,000,000 lbs or more, dlvd Metropolitan areas, E ton 55.00 - —
Solid, bulk, wholesale works ton 85.00 - —
Carbon disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l. same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 —
5-gal. dms., less than 30 dms., same basis lb. .161 —
tanks, dlvd. lb. .0520 —
Carbon tetrachloride, CP, consumers dms., c.l., frt. alld. lb. .12¾ - —
dms., l.c.l., frt. alld. lb. .15¼ - —
Tech., consumers dms., c.l., t.l., frt. alld lb. .11¾ - —
dms., l.c.l. t.l., frt. alld lb. .14¼ - —
tanks, frt alld lb. .10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF dms., 100-lb lots, works lb. 4.00 4.25
dms., smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots lb. 43.00 -45.00
Cardamom seed, bleached "A", lb. 3.45 - —
Bleached "B" lb. 3.15 - —
Decorticated Alleppey, cs. lb. 2.15 - —
Guatemala, cs. lb. 2.85 - —
Green, Alleppey, bgs. lb 2.15 - —
Ceylon, bgs. lb. 2.20 - —
Carmine No 40, NF, bulk, 100-lb lots or more, dlvd. lb. 16.80 —
bulk, smaller lots, dlvd. lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .73 - —
North Country, No. 2, crude, bgs., ton lots lb. .80 - .82
refd., pure, ton lots lb. .87 - .88
North Country, No 3, Ceara, ton lots lb. .68 - .70
North Country No. 3, Parnahyba, ton lots lb. .70 - .71
No. 3, refd., pure, bgs., ton lots. lb. .77 - .78
No. 1, Ceara, yellow, bgs., ton lots lb. .98 - 1.00
Parnahyba, yellow, bgs., ton lots lb. 1.00 - 1.02
Powdered carnauba wax, 20 to 100 mesh 8c per lb higher
Carotene tech, 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram .20½ —
in carrot oil, 5,000,000 to 8,000,000 A units per lb. dms., works million units. .12 —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene in vegetable oil semi-solid suspension 400,000 A units per gram cns kilo 57.60 - —
b-Carotene liquid in vegetable oil, 500,000 A units per gram cns kilo 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram cns kilo 240.00 —
Carvol, bots. lb 5.00 5.40
Cascara sagrada bark, bulk lb. .32 —
Casein, dom. edible, acid precip., 30 mesh, bgs. 10,000-lb. lots or more, works lb. .56 - —
edible acid precip., 80 mesh, bgs. 10,000-lb lots or more, works lb. .64 - —
Imp., inedible acid-precip., gro., Argentine, bgs. c.l., ex-dock Eastern seaports lb. .17¾ - .18¼
Australian, bgs., c.l., same basis lb. .22¼ - .22¾
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J. lb. .24 - —
dms. ton lots, same basis lb. .2[illegible] - —
t.w., same basis lb. .22½ - —
Cassella acid, dms. frt. alld., 100% basis lb 1.44 1.75
Cassia oil, redist., USP, cns lb. 7.50 9.00
Cassia, Padang, "A," bls lb. .31 - —
"B," bls. lb. .30 - —
"C," bls. lb. .29 - —
Korintje "A," bls. lb. .34 - —
"B," bls. lb. .30 - —
"C," bls. lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550 - —
dms., l.c.l. lb. .2650 - —
Castor oil, dom. dehydrated, bodied, dms., c.l lb. .2700 - —
dms., l.c.l. lb. .2850 - —
tanks lb. .2500 - —
dehydrated, unbodied, dms., c.l. lb. .2500 - —
dms., l.c.l. lb. .2660 - —
tanks lb. .2360 - —
hydrogenated, bgs., c.l. lb. .2450 - —
bgs., ton lots lb. .2850 - —
bgs., l.c.l., dlvd lb. .2050 - —
Castor oil, No. 1, dms., c.l. lb. .2150 - —
dms., l.c.l lb. .2300 - —
tanks lb. .2000 - —
No. 3, tech., dms., c.l. lb. .2125 - —
dms., c.l., lb. .2225 - —
tanks lb. .1925 - —
Refd., deod. dms., c.l. lb. .2650 - —
cms., l.c.l. lb. .2750 - —
tanks lb. .2450 - —
USP, dms., c.l. lb. .2350 - —
dms., l.c.l lb. .2450 - —
tanks lb. .2150 - —
Imported, No. 1, Braz., tanks lb. .18½ Nom.
Sulfonated, 50%, dms., works lb. .15 - .15¼
75%, dms., works lb. .19 - .19¼
Castor oil acids, dehydrated, dms. lb. .41¼ - .43¼
Split, dms. lb. .33¾ - .34¾
Castor pomace, bgs., c.l., works ton 35.00 - —
Castoreum nat., cns. lb 5.25 - —
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½ —
Resub. dms., works lb 4.29½ —
Catnip leaves, Southern, bls lb. Nominal.
Caustic potash (see Potash caustic)
Caustic soda (see Soda, caustic)
Cedarleaf oil, USP XIII cns., dms lb 3.25 3.50
Cedarwood oil, cns., dms lb .[illegible] —
Celery seed, French, bgs. lb. .37 - —
Indian, bgs lb .19 —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb. .36 .51
Cellulose acetate butyrate powd., 17% butyryl content, bgs., dlvd E lb. .545 .555
27% butyryl content, bgs. dlvd, E lb. .595 .605
38% butyryl content, bgs. dlvd, E lb. .545 .555
38% butyryl content, half-second, bgs., dlvd E lb. .545 .555
50% butyryl content, bgs. dlvd, E lb. .585 .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium hydrate 74% CeO, fib dms., 100-lb lots or more lb. 1.40 - —
77% CeO, fib dms., 100-lb lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd. lb 1.85 1.90
bgs., smaller lots, dlvd. lb 2.15 —
Cetyl alcohol NF fib cns., c.l., t.l., dlvd E lb. 41½ - —
fib cns., l.c.l. same basis lb. 43½ - —
tanks, same basis lb .39 - —
Extra, cns. c.l., t.l., dlvd E lb. 48½ - —
fib cns., l.c.l., same basis lb. 50½ - —
tanks, same basis lb. .46 - —
Chalk (see Calcium carbonate).



PLANNING! This is the function that makes the Cyanamid Fine Chemicals Department so much more than a bulk producer of fine pharmaceuticals. The ability to devise new products, resolve product problems, or help analyze and realize new marketing ventures, is all part of our custom synthesis service...routinely available to clients. Whatever the nature of your product or problem, "Fine Chemicals" planning and production facilities can be an important factor in your progress.

Vitamins, sulfonamides, antibiotics, intrinsic factor concentrate and other bulk pharmaceuticals. Complete custom synthesis service.

AMERICAN CYANAMID COMPANY
FINE CHEMICALS DEPARTMENT
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

CYANAMID

Chamomile Flowers—Defluorinated Phosphate

Chamomile flowers, Hungarian, lb. .95 - 1.05
Roman, cs. lb. 1.50 - 1.75
Chamomile oil, blue Hungarian. bots lb. 350.00 —
Charcoal, activated NF, fib dms., c.l., works lb .25 .32
fib dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots, works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal hardwood, lump, bulk c.l., f.o.b plant ton 55.00 - —
briquets, bulk, c.l., f.o.b plant ton 80.00 - —
5-lb. paper bgs., c.l., same basis ton 106.00 - —
20-lb. paper bgs., c.l., f.o.b plant, ton 90.00 - —
40-lb paper bgs c.l., same basis ton 86.00 - —
Chenopodium oil, NF, cns lb. 4.75 - 5.00
Chicago acid, paste bbls., frt alld. lb 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min. dms., c.l., works lb .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb lots lb 1.00 - —
jars, 500-lb lots lb 1.03 - —
jars, 100-lb lots or less lb 1.05 - —
Chlordan, agricultural dms., c.l., frt alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt alld lb. .66 - —
Chlordan, clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt alld lb 70 - —
Chlorinated paraffin, 40%., dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., 10 dms or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb 60 - —
ctns., l.c.l., works lb 61 - —
125 cps. ctns., c.l., works lb. .70 - —
200 cps., ctns., c.l., works lb. .80 - —
Chlorine, liq., cyls., c.l., works, frt equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs 3.25 - —
tanks, multiple units, 5 cars, works, frt equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 5.85
tanks, multiple units, 1 car, same basis¾ 100 lbs 6.25 7.25
Chloroacetic acid, mono, flake, 99%, purif., dms., c.l lb. .23½- .25¼
dms. l.c.l lb. .24½- —
tech., flake 96-97%, dms., c.l., dms., l.c.l., frt. equald lb. .20 - —
frt. equald lb. .19 - —
3-Chloro-4-aminotoluene, tech., liq., dms., frt alld lb 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .68 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
dms., t.t.l., same basis lb 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
Chloroform, USP, dms., c.l., dlvd. lb. .27 - —
dms., l.c.l., dlvd lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd E. 100% basis lb. .86½- —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms, frt alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt alld lb. .99 - —
o-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld. lb. .20½- —
o-Chlorophenol, dms., c.l., frt. equald lb .37 - —
dms, l.c.l., same basis lb .38 - —
p-Chlorophenol, dms., c.l., frt equald lb .37 - —
dms l.c.l., same basis lb .38 - —
Chloropicrin, coml., cyls., 180 lbs., frt alld lb 1.07 - —
cyls., 100 lbs., same basis lb 1.08 - —
cyls., 50 lbs., same basis lb 1.14 - —
Chlorosulfonic acid, dms., c.l., frt equald lb 0465- —
dms., l.c.l. frt equald lb 0515- —
tanks, frt. equald lb 0415- —
Chlorosulfonic acid, in stainless steel dms ½c per lb higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., l.c.l., t.t.l., same basis lb. .38 - —
Choline bitartrate, fib dms., frt. adjusted kilo 2.75 3.00
Choline chloride, 100-lb. dms., frt. equald lb. 1.25 - —
Choline dihydrogen citrate, fib dms frt adjusted kilo 2.75 3.00
Chrome green (P dark, light, medium blue content, 15%, bbls. dlvd E of Rockies. lb. .43 - —
blue content, 16-30%, bbls., same basis lb. .44 - —
medium blue content, 41-45% bbls., same basis lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
Chrome green, reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c. higher W of Rockies.

Chrome orange, CP, bbls., dlvd. E of Rockies lb. .35 - —
Chrome orange prices 1c. higher W of Rockies.
Chrome yellow, CP, bbls., dlvd. E. of Rockies lb. .35 - —
Chrome yellow, price 1c. higher W of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb lots, works. lb. .10 - —
Chromium fluoride bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms. c.l., frt alld. lb. 1.20 - —
Pure bgs., c.l., frt alld lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide, NF, bots lb. 1.15 —
Cinchona bark, NF, red, broken, bgs lb .25 —
NF, yellow broken, bgs lb .35 .40
Cinnamic acid, refd., bots lb 2.50 3.50
Cinnamic alcohol, bots lb. 1.50 - 1.60
Cinnamic aldehyde, dms lb. .80 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .53 - —
Ceylon, No. "0000," bgs. lb. .73 - —
Cinnamon bark oil, bots lb. 48.00 -56.00
Cinnamon leaf oil, crude, dms lb 1.60 2.00
USP (Cassia), cns., dms lb 8.50 13.50
Citral, CP, bots. lb. 3.60 4.00
Extra, bots. lb 3.60 5.00
Syn., dms lb. 7.25 7.40
Citric acid USP anhyd., fine gran., bgs., dms., c.l lb. .29½ .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 .30½
bgs., dms., smaller lots lb. .30½- .31
Citric acid, USP hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 .28½
bgs., dms. smaller lots lb. .29 .29½
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms lb 1.00 —
Java-type, dms. lb. .91 - —
Citronellal, bots., dms lb. 1.40 - 1.60
Citronellol, bots., dms. lb. 1.90 2.50
Citronellol, synthetic, dms lb. 1.70 —
Civet, artif., bots lb. 13.75 -15.00
Nat. bots oz. 8.50 15.00
Clay, hall., dom., airfloated, bgs., c.l., Tenn ton. 17.50 21.50
crushed shed moisture, bulk, c.l., Tenn ton 8.00 -11.25
imp., airfloated, bgs., c.l., Atl. port net-ton. 43.00 47.00
lump, bulk, Atl. port net-ton. 31.50 -37.50
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 11.00 -17.00
Georgia, bgs., l.c.l., works. ton. 13.50 -22.50
imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton. 23.00 -35.00
white, powd., bgs., c.l., ex dock net-ton. 50.00 —
bgs., l.c.l., ex whse net-ton. 60.00 -70.00
Cleaners naphtha, petroleum, 105 F Flash, tankcars, New Jersey and New York gal. .18 —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140 F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston, Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1,6, tech., solid, dms., frt. alld lb. .77 - —
1,7, tech., dms, frt alld lb 2.20 - —
Cloves, Madagascar, bgs. lb. .38½- —
Zanzibar, bgs. lb. .38½- —
Clove bud oil, USP, dms lb 2.70 3.60
Clove leaf oil, crude, dms. lb. 1.25 - —
CMC, crude, 96.4% low or medium vis., bgs., 23,000 lbs., dlvd. E., 100% basis lb. .40 - —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 - .50
65%, low or medium vis., bgs., c.l., dlvd. E., 100% basis lb. .40 - —
l.c.l., dlvd. E., 100% basis lb. .42 - 1.00
purif., high vis. (see Cellulose gum).
CMC, standard low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - 1.00
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for soln., tanks, works gal. .17 —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse gal. .39 - —
tanks, works gal 20½- —
Coaltar pitch, aluminum, bulk, works. ton 44.00 - —
Carbon and indust., bulk, works ton 44.00 - —
Core, bulk works ton 40.50 - —
Fiber, bulk works ton 48.00 - —
Roofing, 140-155 F, Federal Specification RP-381, Type I tanks, works ton 41.00 - —
Cobalt acetate, 25% Co., dms., dlvd lb 1.04 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd E of Rockies lb 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies
Cobalt blue, imitation (see Ultramarine blue)
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 - —
Cobalt linoleate, fused 8½% Co., dms lb. 71½- —
Liq., 6% Co., dms lb. 57½- —
Cobalt metal, 99% dms., f.o.b carrier lb 1.50 - —
Cobalt naphthenate, liq., 6% Co., dms, dlvd lb. .48¾- —
Cobalt nitrate 20.1% Co. bbls. dlvd. lb. .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R. lb 1.15 - —
70-71% Co kgs. same basis lb 1.12 - —
Cobalt oxide prices W of Mississippi R 3c. per pound higher
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb 1.35 - —
Cobalt resinate, fused, 3% Co., dms lb. .38½- —
Cobalt sulfate, crvst., 21% Co., dms., dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb 1.09 - —

Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz. 17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots f.o.b. works oz. 13.75 - —
Cocillana bark, bls lb. .18 - .20
Cocoa butter, bgs. lb. .64½- .65½
Coconut oil, crude, tanks, New York lb. .14¼- .14⅜
tanks, Pac. coast lb. .12⅞- —
Refd., deodorized, dms lb. .19½- .20½
Coconut oil acids, dist., dms lb. .23½- .26
tanks lb. .21 - —
double dist. (stripped), dms lb .24½- .27
tanks lb. .22 - —
Cod oil, dms, spot lb. .08¾- .08½
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Codeine hydrochloride cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate USP cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms gal. 1.40 - 1.70
Cohosh root, black, bls lb. .20 - .25
Blue, bls lb 20 - .25
Colchicine USP bots oz. 29.00 - —
Colchicum root, bls lb. .35 - .45
Colchicum seed, bgs lb. .75 - .80
Collodion, USP, dms lb. .32½- —
USP flexible, dms lb. .34 - —
Colocynth pulp, bls lb .75 - —
Colombo root, bls lb. .16 - .18
Condurango bark, bls lb. 18 - .20
Congo copal gum, No. 1, bgs lb. .26 - .27
No. 2, bgs lb. .23 - .25
No. 3, bgs lb. .18 - .20
Copaiba balsam, cns., dms lb. .65 - 1.10
Copaiba oil, cns lb. 1.35 2.00
Copper acetate, bbls, c.l., works. lb. .53 - —
bbls, l.c.l., works lb. .54 - —
Copper carbonate, 55%, dark dense, works lb. 34.85 - —
bgs., l.c.l., works lb. 36.35 - —
Copper chloride, cupric, anhyd., dms., works lb. .44 - .44½
cryst., dihydrate, dms., works, lb. .30 - .30½
cryst., dried., dms., works lb. .38¼- .38¾
Copper chloride, cuprous, dms., works lb. .39¼- .42¼
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .509 - —
dms., 1,000-lb lots or more lb. .619 - —
dms., smaller lots lb. .639 .65
Copper gluconate, dms lb. 3.20 - —
Copper hydrate, dry, dms, c.l., frt. E. of Miss lb. .52½- —
dms., l.c.l., same basis lb. .53 - —
Copper metal, electrolytic, dlvd. Valley, basis lb. .30 - —
Copper naphthenate, liq., 8% Cu, dms, frt alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾ .32¾
Copper oleate, solid, 8% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls, 100-5,000-lb. lots, works lb. .46¼- —
Copper oxide, red, 97% USN Type I, bbls., 100-5,000-lb lots. lb. .47½- —
80% USN Type II, bbls. 100-5,000-lb lots or more, works lb. .46½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb 4.25 - —
10% active quinolinolate, dms lb. 1.14 1.15
Copper resinate, precip., dms., frt. alld lb. .47 - —
Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works, 100 lbs. 12.25 - —
bgs., l.c.l., works 100 lbs. 12.75 -15.25
Monohydrated, 35%, dms., c.l., works 100 lbs. 23.00 - —
dms., l.c.l., works 100 lbs. 23.75 - —
Tribasic, distributors, bgs., c.l., works 100 lbs. 29.60 - —
bgs., l.c.l., works 100 lbs. 31.10 - —
Copper undecylenate, dms lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. ton. 180.00 - —
Pac. ports, c.i.f. ton. 175.00 - —
Coriander oil, USP, bots. lb. 7.25 - 8.75
Coriander seed, Moroccan, bgs. lb. .20 - —
Rumanian, bgs. lb. .18 - —
Yugoslavian, bgs lb. .08½- —
Corn oil, crude, tanks, works lb. .14 - —
Foots (soapstock) acid, 95%, tanks, New York lb. .05¼- —
Refd., salad, dms lb. .1943- .1975
tanks lb. .1743- —
Corn oil acids, dist., dms lb. .14¾- .17¼
tanks lb. .12¼- —
Corn sugar, tanners chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l 100 lbs 7.45 - —
Corn syrup, 43° Be., tanks, dlvd. N.Y. 100 lbs. 6.30 - —
non-ret. dms., c.l., same basis. 100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram. 1.05 - 1.75
Costus oil, bots oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton. 57.00 - —
Cottonseed oil, crude, tanks, South, East lb. .10½- .10½
tanks, Valley lb. .10 - —
tanks, Texas, Lubbock lb. .09¾- —
tanks, Texas, Waco lb. .10 - —
Foots (soapstock), acid, 95%, tanks, Texas, Waco lb. .04½- —
Refd., salad, dms lb. .15⅝- .1575
tanks lb. .13⅜- —
Cottonseed oil acids, dist., dms lb. .14¾- .17¼
tanks lb. .12¼- —
Coumarin, NF, cryst., dms lb 3.30 3.40
Cramp bark, NF, bls lb .90 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, chys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt adjusted gal. .24 - —
Crude, soln 80%, tanks, works, gal. .226 - —
Refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, chys., dms., same basis lb. 1.42 - 1.47
Pinewood, dms., incl., c.l., works, lb. .0611- —
dms, incl., l.c.l., works lb. .0684- —
dms, incl., l.c.l. ex whse, New York lb. .0795- —
tanks, works lb. .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —

m-Cresol, 95-98%, dms., c.l., works lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2,97% 2°C., dms., c.l., frt. equald. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret., dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
o-Cresol, 30.5°C. m.p. and over, ret. Cresol, 29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd lb. .53 - —
tanks, dlvd lb. 49 - —
2,3-Creosotic acid, dms., ton lots. lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., metapara content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Cresylic acid, coaltar, imp., metapara content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more. gal. 1.03½- —
less than 50 dms., same basis gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l, works lb. .25 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd lb. .36 - —
Crvolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
bgs., l.c.l. works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 - —
bgs., t.t.l., works lb. .22 - —
Cubeb berries, NF, bgs lb. 1.00 - —
Powd., cs. lb. 1.15 - —
Cubeb oil, cns lb. 9.00 -12.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks works lb. .11 - —
Cumin seed, Iranian, bgs lb. .20 - —
Moroccan, bgs. lb. .36 - —
Turkish, bgs. lb. .19 - —
Cumin seed oil, bots., cns lb. 15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract. ton. 57.00 - —
Fertilizer, pulv., 21% N, bgs., works unit-ton 2.85 - —
Cyanamide, fertilizer, indust grade bgs, c.l., works ton 75.00 - —
bgs., l.c.l., works ton 96.00 - —
Indust grade 6-16 mesh, dms., c.l., works ton. 120.00 - —
dms, l.c.l., works ton. 140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal 1.02 - —
dms, l.c.l., same basis gal. 1.10 - —
dms., c.l., dlvd. W of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
95% tech. 40-dm. lots or more, f.o.b works gal. .56 - —
5-39 dms., same basis gal. .60 - —
tanks, same basis gal. .36 - —
Cyclohexanol, tech., dms., c.l., works, frt alld. E lb. .28½- —
dms., l.c.l., works, same basis. lb. .29½- —
tanks, works, same basis lb. .26 - —
Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l., works lb. .34½- —
tanks, works lb. .31 - —
Cyclohexylamine, tech., dms., c.l., works lb. .48 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cypress oil, bots. lb. 5.30 - —

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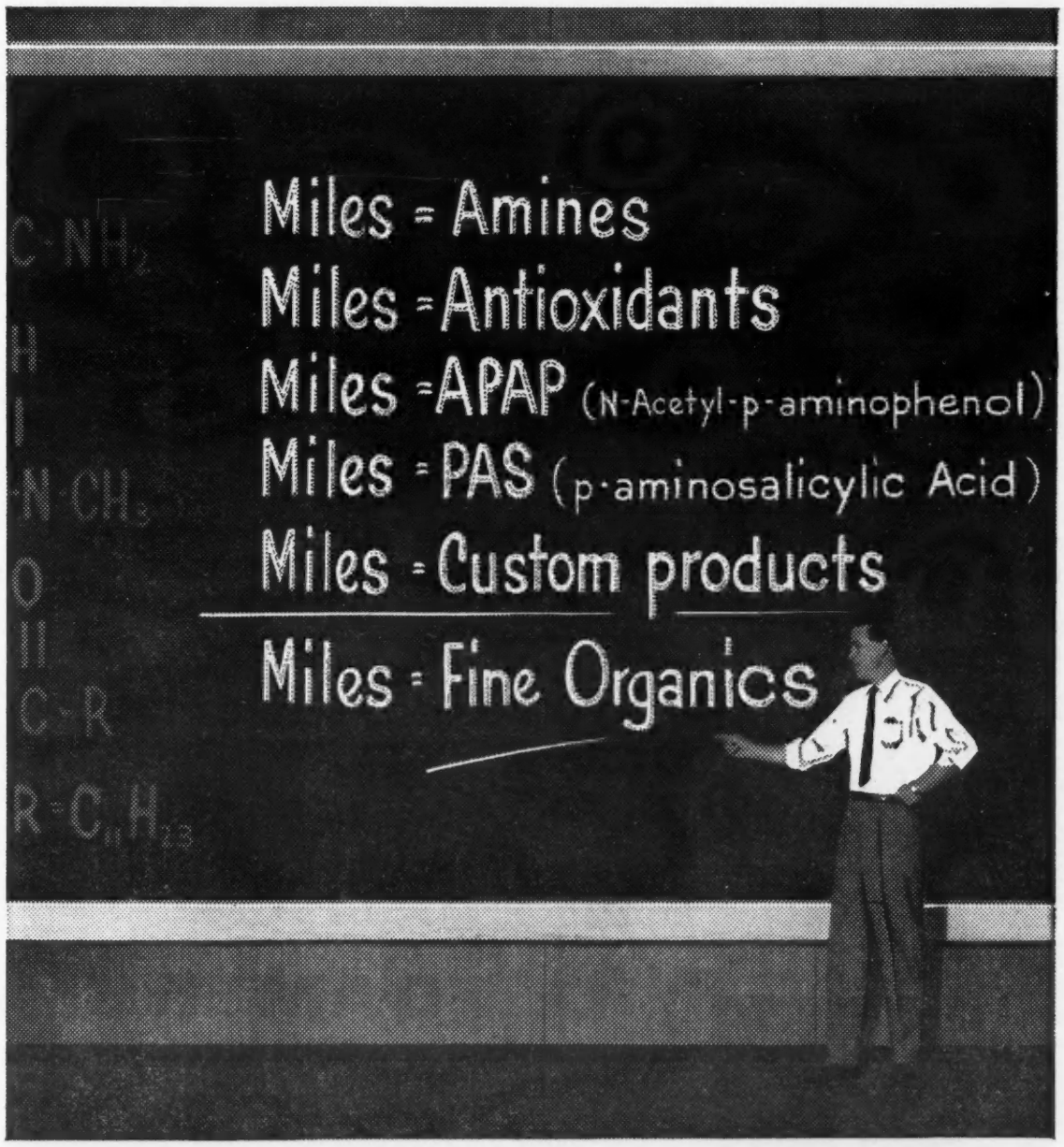
2,4-D tech., bgs., dms., c.l., works, frt. equald lb. .40 - —
bgs, dms., l.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms., c.l., works. lb. .43 - —
dms., l.c.l., same basis lb. .48 - .52
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .48 - .52
tanks, works lb. .42 - —
Dammar gum, Batavia, A E. cs lb. No stocks.
East India, Batu, bold, bgs lb. .15½- .18
nubs and chips, bgs. lb. .09 - .10
black, bold, bgs lb. .15½- .18
nubs and chips, bgs. lb. .12¼- .13¼
unscraped, bgs. lb. .13 - .14½
pale, chips, bgs. lb. .15 - .17
pale, nubs, bgs. lb. .20¾- .24
Siam, cs. lb. .31½- .34
Singapore, No. 1, bgs. lb. .34 - .40
No. 2, bgs. lb. .29 - .32
dust, bgs. lb. .18 - .20
No. 3, bgs. lb. No stocks.
Dandelion root, bls lb. .35 - .40
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib. dms., l.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 - —
bgs., smaller lots, same basis. lb. .25 - —
fib dms., c.l., same basis lb. .24 - —
fib. dms., smaller lots, same basis lb. .26 - —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
i-Decanol, tech., dms., c.l., dlvd. E. lb. .43½- —
dms., l.c.l., dlvd. E. lb. .45½- —
tanks, dlvd. E. lb. .41 - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd. lb. .25 - —
tanks, dlvd. lb. .21 - —
Perfume grade, bots. lb 1.00 - 2.00
Decyl alcohol, normal (see i-Decanol)
Deertongue leaves, bls. lb .55 - .60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss ton. 57.07 - —
18% P, paper bgs., c.l., works ton. 66.25 -81.00
18% P, paper bgs., c.l., t.l., works, Houston, Tex ton. 74.35 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.

Degras, common (15-17% free fatty acid), 400-lb. dms. lb. .12 - .14
Neutral (over 2% free fatty acid), 400-lb. dms. lb. 13 - —
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies. gal. .69½- —
dms., l.c.l., same basis ..... gal. .74½- .80½
tanks, dlvd., same basis ..... gal. .53½- —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies. gal. .72 - —
dms., l.c.l., same basis ..... gal. .77 - .83
tanks, same basis ..... gal. .56 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies. gal. .70½- —
dms., l.c.l., same basis ..... gal. .75½- .81½
tanks, same basis ..... gal. .54½- —
SD2B, dms., c.l., dlvd. E. of Rockies. gal. .69 - —
dms., l.c.l., same basis ..... gal. .74 - .80
tanks, same basis ..... gal. .53 - —
SD3A, dms., c.l., dlvd. E. of Rockies. gal. .68 - —
dms., l.c.l., same basis ..... gal. .73 - .79
tanks, same basis ..... gal. .52 - —
Denatured alcohol, ethyl, SD23A, dms., c.l., dlvd. E. of Rockies. gal. .70½- —
dms., l.c.l., same basis ..... gal. .75½- .81½
tanks, same basis ..... gal. .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies. gal. .71 - —
dms., l.c.l., same basis ..... gal. .76 - .82
tanks, same basis ..... gal. .55 - —
Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies. gal. .69½- —
dms., l.c.l., same basis ..... gal. .74½- .80½
tanks, same basis ..... gal. .53½- —
SD30, dms., c.l., dlvd. E. of Rockies. gal. .68 - —
dms., l.c.l., same basis ..... gal. .73 - .79
tanks, same basis ..... gal. .52 - —
Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd. E. of Rockies. gal. .71 - —
dms., l.c.l., same basis ..... gal. .76 - .82
tanks, same basis ..... gal. .55 - —
Denatured alcohol, ethyl, SD-40, dms., dlvd. E. of Rockies. gal. .70½- —
dms., l.c.l., same basis ..... gal. .75½- .81½
tanks, same basis ..... gal. .54½- —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms. lb. 15.00 - 17.00
dl-Desoxyephedrine hydrochloride, dms. lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.19 - —
100 lbs. 9.34 - —
canary dark, paper bgs., c.l. 100 lbs. 9.03 - —
paper bgs., l.c.l. ..... 100 lbs. 9.18 - —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 8.93 - —
paper bgs., l.c.l. ..... 100 lbs. 9.08 - —
white paper bgs., c.l. .... 100 lbs. 8.77 - —
paper bgs., l.c.l. ..... 100 lbs. 8.92 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher
Dextrose, anhyd., coml., bgs., c.l. 100 lbs. 8.65 - —
bgs. l.c.l. ..... 100 lbs. 8.80 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms. 100 lbs. 14.70 - —
100-lb. dms. ..... 100 lbs. 15.20 - —
Hydrated, coml., bgs., c.l., ex whse. 100 lbs. 7.45 - —
bgs. c.l., ex whse .... 100 lbs. 7.60 - —
USP dms. ..... lb. .19¾- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. ..... lb. .17 - —
tanks, dlvd ..... lb. .13 - —
Tech., dms., c.l., dlvd. ..... lb. .15 - —
dms., l.c.l., dlvd. ..... lb. .16½- —
tanks, dlvd ..... lb. .12½- —
Diacetyl, flavor grade, bots. ..... lb. 3.30 - 4.30
Di-sec-amyl phenol, dms., c.l., works. lb. .32 - —
dms., l.c.l., works ..... lb. .33 - —
tanks, works ..... lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works. lb. .32 - —
dms., l.c.l., works ..... lb. .33 - —
tanks, works ..... lb. .29½- —
Diallylamine, dms., c.l., dlvd. .... lb. .98½- —
dms., l.c.l., dlvd. ..... lb. 1.00 - —
tanks, dlvd. ..... lb. .96 - —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., l.c.l., same basis ..... lb. .94 - —
tanks, same basis ..... lb. .91 - —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd. . lb. .65 - —
t.t.l., dms., same basis ..... lb. .68 - —
Food grade, c.l., t.l., dms., dlvd. lb. .65 - —
dms., t.t.l., same basis ..... lb. .68 - 1.10
Tech., dms., c.l., t.l., dlvd. ... lb. .57 - —
dms., l.c.l., same basis ..... lb. .60 - —
tanks, same basis ..... lb. .54 - —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E. lb. .31½- —
dms., l.c.l., t.t.l., dlvd. E. ..... lb. .33 - —
tanks, dlvd E ..... lb. .29 - —
Dibutyl maleate, dms., c.l., t.l., dlvd. E. lb. .31½- —
dms., l.c.l., t.t.l., dlvd. E. ..... lb. .33 - —
tanks, dlvd. E ..... lb. .29 - —
Dibutyl phthalate, dms., c.l., dlvd. E. lb. .31 - —
dms., l.c.l., same basis ..... lb. .32½- —
tankcars, tanktrucks, 2,000 gals., same basis. lb. .26 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works ..... lb. .68½- —
tanks, works ..... lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld. lb. .65½- —
Dibutylamine, dms., c.l., dlvd. lb. .55½- —
dms., l.c.l., same basis ..... lb. .57 - —
tanks, same basis ..... lb. .53 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .28½- —
dms., l.c.l., dlvd. ..... lb. .30 - —
tanks, dlvd. ..... lb. .26 - —
Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works ..... lb. .63½- .64
tanks, works ..... lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld. lb. .73 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E. lb. .12¾- —
dms., l.c.l., same basis ..... lb. .13¾- —
tanks, same basis ..... lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 - —
dms., 2,000 lbs. or more same basis. lb. .14½- —

1,4-Dichlorobutane, dms., c.l., or t.l., works. lb. .33½- —
dms., l.c.l., or t.l., works .... lb. .34 - —
tanks, works ..... lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E. lb. .15½- —
dms., l.c.l., t.t.l., same basis ... lb. .17 - —
tanks, same basis ..... lb. .13 - —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 - —
dms., l.c.l., same basis ..... lb. .75 - —
Dichloropentanes, dist., dms., c.l., works. lb. .05 - —
dms., l.c.l., works ..... lb. .06 - —
tanks, works ..... lb. .03 - —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine, dms., c.l., works. lb. .54 - —
dms., l.c.l., works ..... lb. .55 - —
tanks, works ..... lb. .52 - —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 - —
Dicyclopentadiene, dms., c.l., f.o.b. works lb. .14½- —
dms., l.c.l., same basis ..... lb. .14¾- —
tanks, same basis ..... lb. .12 - —
Didecyl phthalate, dms., c.l., works. lb. .28½- —
dms., l.c.l., same basis ..... lb. .30 - —
tankcars, tanktrucks, 2,000 gals. lb. .26 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
Dieldrin, dms., c.l., dlvd. ..... lb. 1.85 - —
dms., l.c.l. dlvd. ..... lb. 1.90 - —
Diethanolamine, dms., c.l., dlvd. E. lb. .27 - —
dms., l.c.l., same basis ..... lb. .28½- —
tanks, same basis ..... lb. .24½- —

Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., t.t.l. frt. alld. ..... lb. .28½- —
tanks, frt. alld. ..... lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., same basis ..... lb. .48½- —
tanks, same basis ..... lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd. ..... lb. .71 - —
tanks, dlvd. ..... lb. .67 - —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis ..... lb. .43½- —
tanks, same basis ..... lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. ..... lb. .29 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .26 - —
Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works ..... lb. .20½- —
tanks, works ..... lb. .17½- —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 - —
dms., l.c.l., same basis ..... lb. .59 - —
Diethyl toluamide, 90-95% meta isomer dms., c.l., t.l., works. lb. 2.30 - —
5-44 dm. lots, works ..... lb. 2.35 - —
1-4 dm. lots, works ..... lb. 2.40 - —

N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
Diethylamine, dms., c.l., dlvd E lb. .52 - —
dms., l.c.l., same basis ..... lb. .53½ —
tanks, same basis ..... lb. 49½ —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis ..... lb .58 - —
tanks, same basis ..... lb 55 - —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt. alld., Zone 1 lb. .17½- —
f.o.b., Zone 2 ..... lb. .18½- —
dms., l.c.l., c.l., f.o.b., Zone 1 lb. .19½- —
f.o.b. warehouse points, Zone 2 lb. .20½- —
tankcars, Zone 1 ..... lb. .15 - —
Zone 2 ..... lb. .16 - —
Zone 1 is East of the Rockies. Zone 2, West of the Rockies.
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol dms. c.l., dlvd E. lb. .17¾- —
dms., l.c.l., same basis ..... lb. .19¼- —
tanks, same basis ..... lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works ..... lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works ..... lb. .32¼- —
tanks, dlvd. E. ..... lb. .28¼- —



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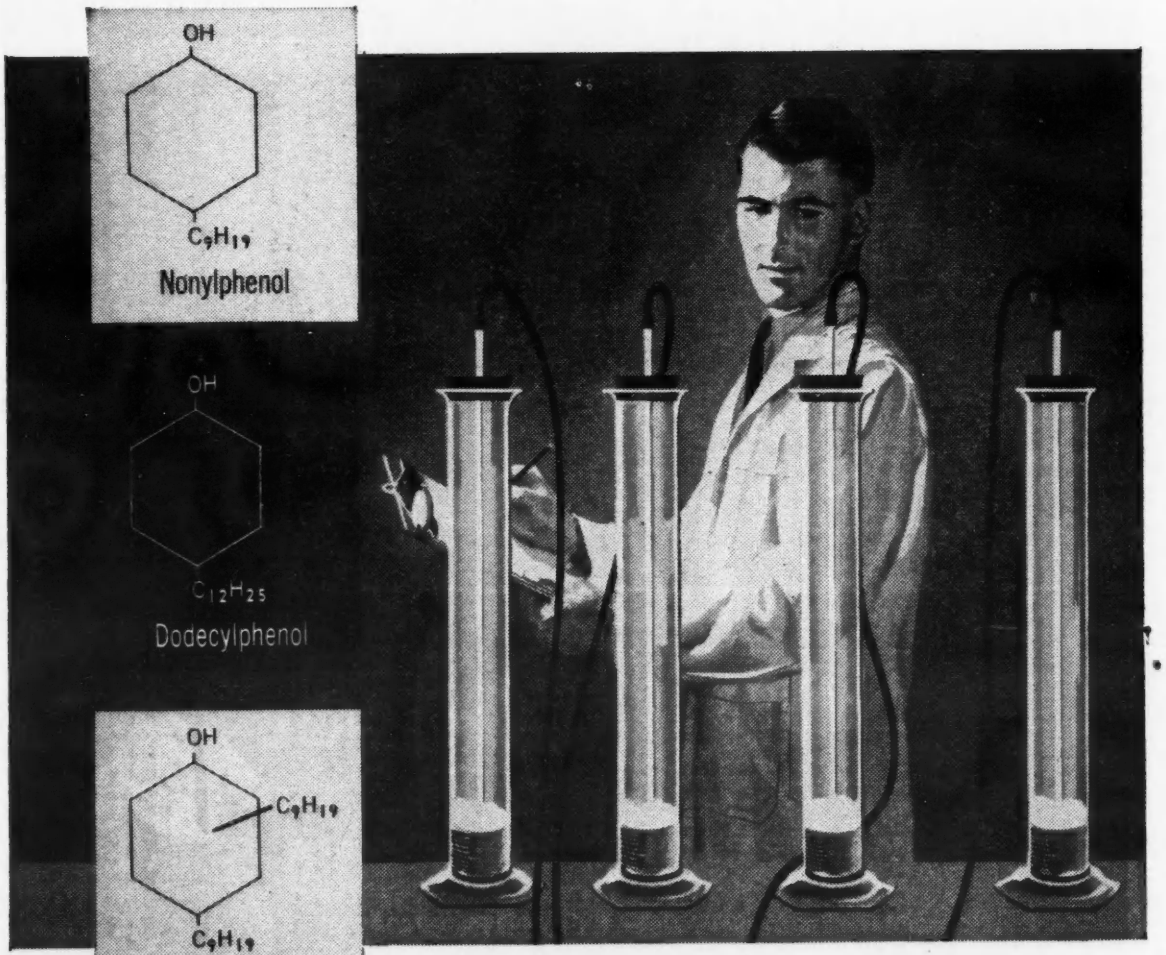
35-60

Diethylene Glycol Monobutyl Ether Acetate—Dyes

Diethylene glycol monobutyl ether acetate, dms., c.l., works, lb. .30¾- —
dms., l.c.l., works lb .31½ —
tanks, dlvd E lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb .22½- —
dms., l.c.l., dlvd lb. .24 - —
tanks, dlvd E lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works, lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb .21 - —
dms., l.c.l., dlvd. lb. .22½- —
tanks, dlvd E. lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd, E lb. .44 - —
dms., l.c.l., dlvd E. lb. .45½- —
tanks, dlvd E. lb. .41½- —
Diethylstilbesterol, USP, bots, 100 kilo lots kilo 100.00 147.50
bots, 1-kilo lot kilo 110.00 152.50
Digitalis leaves USP dom., dms lb 1.25 —
Digitoxin USP bots gram 4.20 —
Diglycol laurate, dms., ton lots lb. .32½- —
Diglycol stearate, dms., t.l. lb. .26 - —
Diglycolic acid bgs. c.l., t.l., works, lb. .15½- —
bgs., l.c.l., works lb. .16 - —
Dihexyl sebacate dms., c.l., works, lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin sulfate bulk, gram .03 - —
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
Tech., dms., 20,000 lbs or more lb 1.11 - —
dms., 1,050 lbs to 20,000 lbs, lb 1.13 - —
dms., 150 lbs to 1,050 lbs lb 1.15 - —
Di-isobutyl ketone, dms., c.l., dlvd, lb .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —
Di-isobutylene dms. c.l., dlvd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd E. lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., works lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tanktrucks, 1,000-1,999 gals., works lb. .26½- —
tankcars, tanktrucks, 2,000 gals., works lb. .26 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine, dms., c.l., dlvd, lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd, E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil, dom., bots., dms. lb. 5.25 - —
Dimethyl anthranilate, cns. lb. 4.15 - —
Dimethyl dichlorovinyl phosphate, 55-gal dms., dlvd lb. 3.50 - —
Dimethyl ethanolamines, anhyd., dms., c.l. dlvd lb. 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms., c.l., dlvd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., dlvd., 100% basis, lb. .69½- —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 - 2.20
Dimethyl phthalate, dms., c.l., works lb. .29 - —
dms., l.c.l., works lb. .30½- —
tanktrucks, 1,000-1,999 gals., same basis lb. .27 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26½- —
Dimethyl sebacate, dms., c.l., works, lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works, lb. .18 - —
dms., l.c.l., works lb. .18½- —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38¼- —
tanks, frt. equald, 100% basis, lb. .38 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald, 100% basis, lb. .38 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms., frt. alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies, lb. 1.56 - —
Dinitroaniline orange toner prices 1c higher W of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼- —
dms., l.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 - —
2,4-Dinitrophenol bbls. lb. .41 - —
2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld lb. .28½- —
dms., l.c.l., frt. alld lb. .30 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 - —
Dioctyl sebacate, dms., c.l., works, lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., l.c.l., works lb. .62¼ —
tanks, works, dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l., dlvd. E. lb. .33 - —
tanks, dlvd. E. lb. .29 - —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .34 - —
bgs., l.c.l., l.t.l., dlvd. E lb. .35 - —
Dipentene, dest.-dist., dms., c.l., works gal. .58 - —
dms., l.c.l., works lb. .62 - —
dms., l.c.l., ex whse. gal. .78 - —
tankscars, works gal. .41 - —
Steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South lb. .55 - —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 - —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 - —
Diphenyl, bgs., c.l., t.l., works lb. .16¾- —
bgs., l.c.l., works lb. .18½- —
tanks, works lb. .15¾- —
Diphenyl oxide, perfume grade, cns. lb. .55 - .70
Diphenyl phthalate, dms., c.l., works, lb. .52 - —
dms., l.c.l., works lb. .54 - —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .32 —
bgs., l.c.l., same basis lb. .34 —
Refd., fused, tanks, same basis lb. .29 - —
Refd., diphenylamine in dms., ½c. per lb higher
Diphenylguanadine bgs., dms., ton lots, frt. alld lb. .49 - —
bgs., smaller lots frt. alld lb. .50 - —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., frt. alld. lb. .18½- —
tanks, frt. alld. lb. .14¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 - —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.80 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .69 - —
dms., smaller lots, frt. alld lb. .70 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., l.c.l., works, 100% basis, lb. 1.05 - —
tanks, same basis lb. .90 - —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E lb. .75 - —
dms., l.c.l., t.t.l., same basis lb. .76 - —
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald lb. .134 - —
dms., l.c.l., same basis lb. .144 - —
tanks, same basis lb. .11½- —
Dodecylphenol, c.l., frt. alld lb. .22½- —
dms., l.c.l., same basis lb. .23½- —
tanks, same basis lb. .20 - —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd.:
Blue, FD&C, No. 1 lb.15.65 -17.60
No. 2 lb.15.65 -17.60
Green, FD&C, No. 1 lb.15.65 -17.60
No. 2 lb.19.60 -22.85
No. 3 lb.31.30 -35.20
Red, FD&C, No. 1 lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb.19.60 -22.85
No. 4 lb 5.55 7.50
Dyes, coaltar, certified colors for drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:
Violet, FD&C, No. 1 lb.15.65 -17.60
Yellow, FD&C, No. 1 lb. 9.15 -11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:
Black, D&C, No. 1 lb.10.50 -10.95
Brown, D&C, No. 1 lb.15.65 -16.10
Green, D&C, No. 5 lb.15.65 -16.10
No. 6 lb.15.65 -16.10
No. 7 lb.14.35 -14.80
Orange, D&C, No. 3 lb.10.50 -10.95
No. 4 lb.19.60 -20.05
No. 5 lb 3.80 4.25
Red, D&C, No. 17 lb.10.50 -10.95
No. 18 lb.23.60 -24.00
No. 19 lb.15.00 -15.45
No. 21 lb 3.90 4.35
No. 22 lb.10.50 -10.95
No. 28 lb.24.15 -24.65
No. 33 lb.17.00 -17.45



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Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

Violet, D&C, No. 2	lb.	15.65	16.10
Yellow, D&C, No. 7	lb.	10.50	10.95
No. 8	lb.	10.50	10.95
No. 10	lb.	13.05	13.50
No. 11	lb.	13.05	13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:

Blue, Ext., D&C, No. 1	lb.	15.65	16.10
Green, Ext., D&C, No. 1	lb.	15.65	16.10
Red, Ext., D&C, No. 1	lb.	13.05	13.50
Yellow, Ext, D&C, No. 1	lb.	10.50	10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.

11110	Brilliant scarlet BN	lb.	1.79	—
13390	Fast blue SR	lb.	1.43	—
14025	Yellow 2G	lb.	1.26	—
14030	Orange R, extra, conc.	lb.	1.64	—
14645	Chrome black T	lb.	.77	—
14720	Rubine XX, conc.	lb.	1.59	—
15510	Orange Y, extra conc.	lb.	.83	—
15575	Orange RR	lb.	.99	—
15620	Fast Red A, conc.	lb.	1.61	—
15705	Chrome blue black R, conc.	lb.	1.12	—
16150	Scarlet 2RL	lb.	1.22	—
16255	Brilliant scarlet 3RN, conc.	lb	1.26	—
16230	Fast light, orange 2G	lb.	1.39	—
17590	Brown PG	lb	3.00	—
18050	Phloxine 2G	lb.	1.05	—
18055	Fuchsine 6B	lb.	1.55	—
18965	Fast yellow 2G	lb.	2.32	—
19140	Yellow XX	lb.	2.48	—
19555	Yellow NN, conc.	lb.	3.67	—
20170	Brown Y	lb.	1.53	—
20470	Blue black extra conc	lb	1.44	—
21010	Brown, RX, conc.	lb.	1.42	—
22240	Scarlet B	lb.	2.81	—
22310	Red FC	lb.	1.57	—
22311	Brown MCW	lb.	1.47	—
22610	Blue 2B, extra conc.	lb.	1.53	—
23500	Red 4BX, conc.	lb.	1.80	—
24410	Sky blue FF, extra, conc.	lb.	1.95	—
24895	Brilliant yellow, conc.	lb.	3.27	—
26360	Navy blue 3R, conc.	lb.	1.84	—
26695	Black F, conc.	lb.	2.30	—
26900	Milling Red 3R, conc	lb.	2.24	—
27075	Neutral black 2B, conc	lb.	2.75	—
27720	Gray L	lb.	2.18	—
29185	Fast scarlet 4BNC	lb	2.23	—
30015	Diazo black VJ conc	lb	2.48	—
30045	Yellow brown K, extra	lb.	1.32	—
30235	Black EB, 200%	lb.	1.53	—
30295	Green BY, conc.	lb.	1.07	—
35660	Brown B	lb.	2.89	—
37565	Naphthol SWF	lb.	1.85	—
40000	Yellow 2G	lb.	1.44	—
41000	Yellow OX	lb.	2.45	—
42000	Green V, crystals	lb.	2.73	—
42040	Brilliant green G crystals	lb.	3.62	—
42090	Blue EG	lb.	1.85	—
42100	Milling green 6B, conc.	lb.	4.78	—
42640	Violet 4BXN	lb.	2.43	—
43830	Brilliant blue, BBG	lb.	2.44	—
44045	Blue B, extra conc.	lb.	3.61	—
45170	Red BX	lb.	4.76	—
50415	Nigrosine SSJ	lb.	1.03	—
52015	Blue GXX	lb.	2.33	—
58005	Alizarin red SC	lb.	3.64	—
59700	Golden orange GFD, single paste	lb.	2.70	—
59710	Flaming orange 6RD double powder	lb.	4.90	—
59800	Dark blue BO, single paste.	lb.	2.28	—
59825	Jade green NC supra, double paste	lb.	1.50	—
61570	Alizarin green CG extra	lb.	3.81	—
63010	Alizarin blue SAPG	lb.	3.90	—
63615	Alizarin blue black B	lb	3.26	—
69825	Blue BLFD double paste	lb.	2.76	—
70800	Brown BR single paste	lb.	2.03	—

Dyes, coaltar oil-soluble, 100-lb. drums, dlvd. No

12140	Oil scarlet BL	lb	1.87	—
12055	Oil orange 7078 V	lb	1.38	—
26120	Oil red N 1700	lb	1.94	—
42535B	Methyl violet base	lb	1.88	—
44045B	Victoria blue base	lb	4.06	—
50415B	Oil black 8603	lb.	.80	—
61565	Alizarin cyanine green base.	lb.	6.13	—
	Spirit black RB	lb.	3.89	—
	Spirit brown GN	lb	5.30	—
	Spirit orange R conc.	lb.	5.87	—
	Spirit red B conc	lb.	6.41	—
Pr. 517	Spirit yellow 2R conc	lb	4.62	—
Pr. 554	Spirit blue THN	lb.	5.06	—

E

Echinacea root, bls.	lb.	1.25	—
Elm bark, grinding, bls.	lb.	.30	.32
Powd., bbls., ¼s	lb.	.60	—
Select, bundles	lb.	.75	—
Emetine hydrochloride, USP, bots.	oz.	48.40	—
Endrin, tech, dms., 100-lbs or more, 100% basis, dlvd.	lb.	2.77	—
Eosin red toner, bbls, works	lb.	1.95	—
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots	oz.	.98	1.00
hydrous, bots., 100-oz. lots,	oz.	.92	—
Ephedrine hydrochloride NF, dms., 100-oz., f.o.b. works	oz.	.75	—
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b works	oz.	.73	—
USP, powd., dms., 100-oz., same basis	oz.	.73	—
Epichlorohydrin, dms., c.l., dlvd	lb.	.29½	—
dms., l.c.l., dlvd.	lb.	.31	—
tanks, dlvd.	lb.	.27	—
l-Epinephrine base, syn. USP, bots., 100 gram lots	gram	.58	—
Epsom salt (see Magnesium sulfate).			
Erigeron oil, cns.	lb.	11.00	—
Ergot, NF, dms., tin-lined	lb.	2.00	—
Eserine salicylate, bots.	oz.	44.00	—
Eserine sulfate, bots.	oz.	86.00	—
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md. Ky., E. States, Minneapolis, N. C., Ohio, St Louis, St. Paul, Va., W Va	lb.	.18½	—
Wood-rosin type, dms. c.l., same basis	lb.	.18½	—
Ether (see specific product).			
Ethyl acetate, nat., ferment, 85-88%, dms., c.l., dlvd	lb.	.15	—
dms., l.c.l., dlvd.	lb.	.16½	—
tanks, dlvd	lb.	.12½	—
95-98%, dms, c.l., dlvd.	lb.	.15¼	—
dms., l.c.l., dlvd.	lb.	.16¾	—
tanks, dlvd.	lb.	.12¾	—
Ethyl acetate, nat., ferment, 99%, dms., c.l., dlvd	lb.	.15¼	—
dms., l.c.l., dlvd.	lb.	.17	—
tanks, dlvd.	lb.	.13	—
syn., 85-88% dms., c.l., dlvd	lb.	.15	—
dms., l.c.l., dlvd.	lb.	.16½	—
tanks, dlvd.	lb.	.12½	—
Ethyl acetate, syn, 95-98%, dms., c.l., dlvd	lb.	.15¼	—
dms., l.c.l., dlvd	lb.	.16¾	—
tanks, dlvd	lb.	.12¾	—
99%, dms., c.l., dlvd.	lb.	.15½	—
dms., l.c.l., dlvd.	lb.	.17	—
tanks dlvd.	lb.	.13	—
Ethyl acetoacetate, dms., c.l., dlvd.	lb.	58½	—
dms., l.c.l., dlvd.	lb.	.60	—
tanks, dlvd.	lb.	.56	—
Ethyl acrylate, dms., c.l., t.l., dlvd.	lb.	.34¼	—
dms., l.t.l., dlvd.	lb.	.35¼	—
tanks, dlvd.	lbm.	32¼	—
Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., dlvd. E of Rockies	gal.	20.63	—
dms., l.c.l., same basis	gal.	20.73	20.84
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E of Rockies	gal.	68	—
dms., l.c.l., same basis	gal.	78	.89
tanks, same basis	gal	52	—
Ethyl alcohol, absolute 200 pf., tax paid, dms, dlvd E of Rockies	gal.	21 75	—
dms., l.c.l., same basis	gal.	21.85	21.96
tanks, same basis	gal.	21 59	—
Ethyl alcohol, denatured (see Denatured alcohol ethyl)			
Ethyl aminobenzoate, USP (see Benzocaine).			
Ethyl amyl ketone, dms, c.l., dlvd.	lb.	.20	—
dms, l.c.l. same basis	lb	21½	—
tanks, same basis	lb	17½	—
Ethyl benzoate, bots.	lb	.75	1.00
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E	lb	.43	—
dms, l.c.l. frt alld E	lb	.45	—
tanks, frt. alld. E	lb.	.40	—
Ethyl butyl ketone, dms., c.l., t.l., works	lb	.36	—
dms, l.c.l., t.l. works	lb.	36¾	—
tanks, works	lb.	.34	—
Ethyl butyrate, dms, works	lb.	.85	1.00
Ethyl carbamate (see Urethane)			
Ethyl cellulose, vis. 4 cps., ngs., 5,000 lb lots or more, frt. alld. E	lb.	.73	—
bgs., smaller lots frt. alld E	lb.	.75	—
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E	lb.	.68	—
bgs., smaller lots, frt. alld E.	lb.	.70	—
Ethyl chloride, tech., cyls., works.	lb.	.20	.22
dms., works	lb.	.18	.20
tanks, works	lb.	10	—
Ethyl cinnamate, cns.	lb.	3.15	3.35
Ethyl ethanolamies, mixed, dms., c.l., dlvd. E	lb.	.43½	—
dms., t.c.l., dlvd. E	lb.	.44½	—
tanks, dlvd E	lb.	.41½	—
Ethyl ether, absolute, ACS, dms	lb.	.27	—
Anesthesia, USP dealers, 1-lb. cns	lb	1.01	—
½-lb. cns	lb	1.09	—
¼-lb cns.	lb	1.21	—
Indust, dms, c.l. dlvd.	lb.	.13½	—
dms., t.c.l., dlvd. E.	lb.	.15	—
tanks, dlvd E.	lb.	.11	—
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E	lb.	.37	—
dms., t.c.l., t.t.l., dlvd. E	lb.	.38½	—
tanks, dlvd E.	lb.	.34½	—
2-Ethyl hexoic acid, 1c. higher W. of Rockies.			
2-Ethyl hexyl acrylate, dms., c.l. t.l., straight or mixed frt. alld. E	lb.	.42½	—
dms., l.t.l., same basis	lb.	.43½	—
tanks, same basis	lb.	.40	—

Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

2-Ethylhexyl alcohol, dms., c.l., dlvd.	lb.	.23¾	—
dms., t.c.l, dlvd	lb.	.25¼	—
tanks, dlvd	lb	21¼	—
Ethyl iodide, chys, works	lb	3.30	—
Ethyl methacrylate, dms, c.l., frt. equald	lb	52	—
dms., t.t.l. frt. equald	lb	52½	—
tanks, frt. equald	lb	50	—
Ethyl morphine hydrochloride, USP, bots	oz.	11.85	—
Ethyl oenanthate, dms	lb	1.05	1.30
Ethyl oxalate (see Diethyl oxalate).			
Ethyl silicate, dist (see Tetraethyl orthosilicate).			
Ethyl silicate, 40% available SiO_2, dms., c.l., dlvd	lb.	.44½	—
dms., t.c.l., dlvd	lb	46	—
tanks, dlvd	lb	42	—
N-Ethyl-a-naphthylamine, dms., works.	lb.	1.04	—
N-Ethyl-m-toluidine, tech., tiq., tanks frt. alld	lb.	.83	—
N-Ethyl-o-toluidine, bbls	lb.	.88	—
Ethylamine (see Mono-, Di-, or Tri-)			
N-Ethylaniline, dms., c.l., frt. alld.	lb.	.57	—
dms., t.c.l., frt. alld	lb	.58	—
tanks, frt. alld	lb.	.55	—
Ethylbenzene, 99% dms., c.l., t.l., frt. equald	lb.	.14	—
dms, l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.11¼	—

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2-Ethylbutyl Alcohol—1-Glutamine

2-Ethylbutyl alcohol, dms., c.l., works lb .30 - —
dms., l.c.l., works lb .30¾- —
tanks, works lb .28 - —
Ethylene, contract refy gate lb .0475- .0525
Ethylene dibromide dms. c.l., frt. equald lb .30½- —
dms., l.c.l. frt equald lb .31½ —
tanks frt equald lb .28½- —
Ethylene dichloride dms. c.l. divd. lb .11½- —
dms., l.c.l., same basis lb .13 - —
tanks, same basis lb .09 - —
Ethylene dichloride prices W and Rockies, 1c. per lb higher
Ethylene glycol, indust., dms., c.l., divd E lb .16 - —
dms., l.c.l., same basis lb .17½- —
tanks, same basis lb .13½- —
Ethylene glycol monobutyl ether, dms. c.l., divd E lb .22
dms., l.c.l., divd E lb .23½-
tanks, divd E lb .19½- —
Ethylene glycol monoethyl ether, dms. c.l., divd. E lb .21 - —
dms., l.c.l., divd. E lb .22½- —
tanks, divd E lb .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., divd. E lb .19½-
dms., l.c.l., divd E lb .20½- —
tanks, divd. E lb .17 - —
Ethylene glycol monomethyl etner, dms. c.l., divd. E lb .21 - —
dms., l.c.l., divd. E lb .22½- —
tanks, divd. E. lb .18½- —
Ethylene glycol monomethyl ether acetate dms., c.l., divd. E lb .29 - —
dms., l.c.l., divd. E lb .29¾- —
tanks, divd E lb .27 - —
Ethylene glycol monostearate, flake, 150-lb. ctn lb .33 - —
Ethylene oxide, dms., c.l., divd E. lb .21½- —
dms., l.c.l., divd. E lb .24½- —
tanks, divd E lb .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine 85-88%, dms., c.l., divd. E., 100% basis lb .42 - —
dms. l.c.l., divd E., 100% basis. lb .43 - —
tanks divd E., 100% basis lb .40 - —
Ethyl vanillin, 100-lb. fib. dms., 500-lb lb 5.65 - —
less than 500-lb. lb 6.10 - —
Eucalyptol, USP, cns., dms lb .85 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms lb .45 - —
NF, rectified, 80-85%, dms. lb .53 - .63
Eugenol, tech., dms lb 1.45 - —
USP, dms. lb 2.00 - —
Euphorbia herb, bls. lb .12 - .15

F

F salt, paste, tech. dms., works lb 2.30 - —
Fennel oil, sweet, USP, cns. lb 2.60 - —
Fennel seed, Argentine, bgs. lb .16 - —
French, light, bgs. lb .16 - —
Indian, light, bgs. lb .17½- —
Rumanian, bgs. lb .14 - —
Yugoslav, light, bgs. lb .16½- —
Fenugreek seed, Moroccan, bgs. lb .08 - —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works 100 lbs. 8.50 - —
Ferric chloride, indust., cryst., bbls., c.l., works 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb .08½- —
Ferric citrate gran., dms lb .86 - —
Ferric hypophosphite, NF, 175-lb. dm lb 4.25 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs lb .73 - .75
Ferric pyrophosphate, NF VII, soluble, gran. pearls, 225-lb. dm. lb .79 - —
Ferric resinate, dms., ton lots, frt. alld lb .45 - —
lots, frt. ald lb .40¼- —
Ferric stearate, dms., c.l., frt. alld. lb .39 - —
dms., l.c.l., frt. alld lb .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton 35.25 - —
bgs., l.c.l., works ton 36.25 - 42.25
bulk, c.l., works ton 33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb .65 - .68
Green pearls, USP XII, gran., dms lb .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb .32½- .54½
Ferric-sodium oxalate, fine gran., dms lb .27½- .39½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton 34.50 - —
bgs., l.c.l., divd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
USP, cryst., bbls., dms lb .09½- .10
Fir balsam, Canada, bbls. gal 32.00 - 35.00
Oregon, bbls. gal 3.40 - 4.64
Fir oil, Canada, cns lb 1.75 - 2.50
Fish oil, refd., alkali, dms. lb .1300- .1350
Kettle-bodied, dms. lb .1530- .1580
Light-pressed, dms. lb .1150- .1200
tanks lb .10 - —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton 92.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton 88.00 - —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo lots or more gram .30 - .44
10% feed grade, fib dms., 3 kilos or more kilo 30.00 - 44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., divd lb .0695- —
tanks, divd. lb .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, divd lb .0375- —
Formic acid, 85%, cbys., c.l., works. lb .1570- —
cbys., l.c.l., works lb .1620- .1720
90%, cbys., c.l., works lb .1625- —
cbys., l.c.l., works lb .1675- .1775
Fringetree bark, bls lb .65 .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald lb .23¼- —
dms., l.c.l., frt equald lb .24¾- —
Fumaric acid in bags ½c. per lb less.
Furfural, dms., c.l., works lb .13 - —
dms., l.c.l., works lb .14 - —
tanks, divd. E lb .11½- —
tanks, divd. W lb .12½- —
Furfuryl alconol, cns., works lb .28 - —
dms., c.l., t.l., Newark, N. J. lb .20½- —
dms., l.c.l., l.t.l., Newark, N. J lb .21½- —
dms., c.l., t.l., Memphis, Tenn lb .19 - —
dms., l.c.l., l.t.l., Memphis, Tenn. lb .20 - —
tanks, Memphis, Tenn. lb .175 - —
Fusel oil, refd. dms., c.l., divd lb .18 - —
dms., l.c.l., divd. lb .19½- —
tanks, divd. lb .15½- —

G

G salt, bbls., frt. alld., 100% basis. lb .73 - —
Gallic acid, NF, VII, bbls., 1,000-lb. lots lb 2.00 - —
bbls., smaller lots lb 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb 1.78 - —
bbls., smaller lots lb 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
Imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, 75 AOAC test, bbls., c.l., divd lb .55 - —
150 AOAC test, bbls., c.l., divd. lb .64 - —
200 AOAC test, bbls., c.l., divd. lb .70 - —
225 AOAC test, bbls., c.l., divd. lb .74 - —
275 AOAC test, bbls., c.l., divd. lb .82 - —
Gelsenium root, bls. lb .30 - .35
Gentian root, bls. lb .24 - —
Grd., bbls., bxs. lb .30 - —
Powd., bbls., bxs. lb .30 - —
Geraniol, extra cns., dms. lb 1.75 2.40
Soap grade, dms. lb .90 1.75
Standard, cns., dms. lb 1.65 —
Synthetic, dms. lb 1.30 —
Geranium oil, Algerian, cns. lb 22.00 -23.00
Bourbon, cns. lb 26.00 -28.00
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb 1.90 - 2.70
Synthetic, dms. lb 1.45 - —
Ginger oil, dist., bots. lb 11.50 -14.00
Ginger oleoresin, NF, from African root, bots lb 4.25 - 5.00
NF, from Jamaican root, bots. lb 7.75 - —
Ginger root, Cochin, bgs. lb .28 - —
Jamaican, No. 3, bgs. lb .28 - —
Nigerian, split, bgs. lb .22 - —
Sierra Leone, bgs. lb .33 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., f.o.b. works lb .20 - —
dms., l.c.l., f.o.b. works lb .21 - —
tanks, f.o.b. works lb .17 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., divd lb .16 - —
131 jellygrams, bgs., c.l., same basis lb .16½- —
164 jellygrams, bgs., c.l., same basis lb .18½- —
Glue, bone, extracted, dry bone, 191 jellygrams, bgs., c.l., same basis lb .19½- —
222 jellygrams, bgs., c.l., same basis lb .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb .16 - —
86 jellygrams, bgs., c.l., same basis lb .16 - —
115 jellygrams, bgs., c.l., same basis lb .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb .17½- —
164 jellygrams, bgs., c.l., same basis lb .18½- —
180 jellygrams, bgs., c.l., same basis lb .19½- —
200 jellygrams, bgs., c.l., same basis lb .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., divd lb .18 - —
95-149, bgs., c.l., divd lb .19 - —
122-149, bgs., c.l., divd lb .20½- —
150-177, bgs., c.l., divd lb .22½- —
178-206, bgs., c.l., divd lb .25 - —
Glue, hide, 207-236, bgs., c.l., divd lb .28 - —
237-266, bgs., c.l., divd lb .30½- —
267-298, bgs., c.l., divd lb .32½- —
299-330, bgs., c.l., divd lb .34½- —
331-362, bgs., c.l., divd lb .36½- —
363-394, bgs., c.l., divd lb .38 - —
395-427, bgs., c.l., divd lb .40 - —
428-460, bgs., c.l., divd lb .42 - —
461-494, bgs., c.l., divd lb .44 - —
495-529, bgs., c.l., divd lb .46 - —
Hide glue, l.c.l., prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld lb 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo 150.00 -300.00
Bots., 50-kilo lots kilo 100.00 —
Bots., 500-kilo lots kilo 75.00 - —

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014

Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd.	lb.	.20	—
nat., crude, soaplye, 80%, tanks, dlvd	lb.	.18	.18¼
nat., refd., USP, CP, 99%, dms., c.l., dlvd	lb.	.30⅞-	—
dms., l.c.l., dlvd.	lb.	.31⅝-	—
tanks, dlvd.	lb.	.29½-	—
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd	lb.	.30	—
dms., l.c.l., dlvd.	lb.	.30¾-	—
tanks dlvd.	lb.	.28¼-	—
nat., high gravity, dms., c.l., dlvd	lb.	.30¾-	—
dms., l.c.l., dlvd.	lb.	.31½-	—
tanks, dlvd.	lb.	.29	—
Glycerine, dom., syn., dms., c.l., dlvd	lb.	.31	—
dms., l.c.l., dlvd.	lb.	.31¾-	—
tanks, dlvd.	lb.	.29¼-	—
Imp., nat., crude, soaplye, 80%, c.i.f.	lb.	.17½-	—
Glycine (see Aminoacetic acid).			
Glycerol (see Glycerine).			
Glycolic acid (see Hydroxyacetic acid).			
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works	lb.	.40	—
dms., l.c.l., same basis	lb.	.42	—
tanks, same basis	lb.	.39	—
Glyoxal, 30%, dms., c.l., works	lb.	.20½-	—
dms., l.c.l., works	lb.	.21¼-	—
tanks, works	lb.	.18	—
Golden seal root, NF, tested, bls.	lb.	3.10	—
Gramicidin, 1 to 5 kilos, f.o.b. works.	gram.	4.25	—
Grapefruit oil, dms	lb.	4.00	—
Graphite, amorp., powd., bgs., fib. dms., ex whse	lb.	.06	.09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse	lb.	.19	.21½
90-92%, powd., bgs., fib. dms., ex whse	lb.	.21	.24½
95-97%, powd., bgs., fib. dms., ex whse	lb.	.29	.31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	.31
Grease, white, choice all hog, tanks, dlvd.	lb.	.08¾-	.09
Yellow, tanks, dlvd.	lb.	.05	.05¼
Grease oil, No. 1, dms., c.l.	lb.	.13¾-	—
dms., l.c.l.	lb.	.14¾-	.15¾
Extra winter, strained, dms., c.l.	lb.	.16¼-	—
dms., l.c.l.	lb.	.17¼-	.18¼
Prime, burning, dms., c.l.	lb.	.17¾-	—
dms., l.c.l.	lb.	.18¾-	.19¾

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls.	lb.	.40	—
Guaiacol, NF, cryst., dms., tins	lb.	2.10	2.15
NF liq., cbys., dms.	lb.	2.30	2.40
Guaiacwood oil, cns.	lb.	.63	.80
Guaiacol carbonate NF VII, dms	lb.	3.40	3.45
Guar gum, food grade, bgs., c.l.	lb.	.38	—
bgs., 5,000 lbs or more	lb.	.39	—
Indust., bgs., c.l.	lb.	.32	—
Tech grade, bgs.	lb.	.30	.33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls. c.l., frt. alld., 100% basis	lb.	1.00	—
bbls., l.c.l., same basis	lb.	1.05	—
Hansa yellow 10 G bbls., dlvd. E. of Rockies	lb	2.45	—
Hansa G yellow, pigment, bbls.	lb.	2.20	—
Hawthorn berries, bgs.	lb.	.18	.20
Heliotropin 100-lb lots, dms.	lb.	2.60	3.40
Hellebore root dom., green, bls	lb.	.70	.75
Helonias root bls.	lb.	1.50	—
Hemlock oil, cns.	lb.	2.55	3.00
Henbane leaves, bls	lb.	.40	.45
Heptachlor dms., c.l., t.l., frt. alld., 100% basis	lb.	.96	—
Heptane, indust., tankcars, New Jersey and New York	gal.	.20	—
Houston, Texas	gal.	.1625-	—
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works	lb.	8.95	—
Hesperidin methylchalcone, bots., 50-lb lots, works	lb.	22.50	—
bots., 5-lb. lots, works	lb.	23.00	—
bots., 1-lb. lots, works	lb.	23.50	—
Hexachlorophene, dms., 1,100 lbs. or more	lb.	1.84	—
dms., to 1,100 lbs.	lb.	1.94	—
Hexalin (see Cyclohexanol).			
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City	lb.	.233	—
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis	lb.	.243	—
bgs., smaller lots, same basis	lb.	.253	—
fib. dms., 1,000-lb. lots or more, same basis	lb.	.250	—
fib dms., smaller lots, same basis	lb.	.253	—
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia	lb.	.42½-	—
bgs., smaller lots, same basis	lb.	.43½-	.48½
Hexane, industrial, tankcars, New Jersey and New York	gal.	.20	—
Houston, Texas	gal.	.16	—
1-Hexanol, dms., c.l., works	lb.	.35	—
dms., l.c.l., works	lb.	.35¾-	—
tanks, works	lb.	.33	—
Hexyl cinnamic aldehyde, dms.	lb.	3.95	4.00
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½-	—
dms., l.c.l., works	lb.	.76	—
Hexyl salicylate, dms.	lb.	1.70	1.75
Hexylene glycol, dms., c.l., dlvd	lb.	.17½-	—
dms., l.c.l., dlvd.	lb.	.19	—
tanks, dlvd.	lb.	.15	—
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd	lb.	14.00	—
dms. smaller lots, dlvd.	lb.	14.50	—
Homatropine hydrobromide, USP, bots	oz.	3.25	—
Homatropine methylbromide, USP, bots	oz.	3.25	—
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton		6.75	—
Horehound herb, bls.	lb.	.18	.20
Hydrastis (see Goldenseal).			
Hydrazine hydrate, 85% ret. dms., works	lb.	1.35	1.55
100%, ret. dms., works	lb.	1.60	1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works	lb.	2.92	—
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1	lb.	.29¼-	—
dms., l.c.l., dlvd. zone 1	lb.	.29¾-	.30¼
tanks, dlvd. zone 1	lb.	.27¼-	—

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt. equald	lb.	.48	.52
Hydrochloric acid, anhyd. (see Hydrogen chloride).			
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs		2.50	—
cbys., l.c.l., dlvd. Metropolitan area 100 lbs		2.90	3.05
tanks, works, frt. equald	ton.	28.00	—
20°, cbys., c.l., works 100 lbs		2.75	—
cbys., l.c.l., dlvd. Metropolitan area 100 lbs		3.15	—
tanks, works, frt. equald	ton.	30.00	—
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs		3.25	—
cbys., l.c.l., dlvd. Metropolitan area 100 lbs		3.65	—
tanks, works, frt. equald	ton.	35.00	—
Hydrochloric acid CP, USP, consumers, cbys., extra, c.l., works	lb.	.15¾-	—
cbys., l.c.l., same basis	lb.	.17¼-	.17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis.	lb.	.20¾-	—
Hydrocortisone acetate, bulk, bots., kilo lots or more	gram.	1.05	1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more	gram.	1.10	1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works	pt.	.70	—
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).			
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd. 100 lbs		19.25	—
55-gal. dms., l.c.l., t.l.l., dlvd 100 lbs		20.75	—
20-gal. dms., c.l., t.l., dlvd 100 lbs		21.00	—
Hydrofluoric acid, aqueous, 70%, 20-gal., dms., l.c.l., t.l.l., dlvd. 100 lbs		22.50	—
tanks, works frt. equald 100 lbs		13.40	—

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis	lb.	.07	—
Hydrofuramide, dms., fib. ctns., works	lb.	.30	.40
50-lb. cyls., l.c.l., works	lb.	.55	.60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works	lb.	.43	—
Hydrogen cyanide, liq., 98%, tanks, works	lb.	.14	—
Hydrogen fluoride, anhyd., cyls., dlvd. E	lb.	.30½-	.32½
cyls., dlvd W	lb.	.39	—
tanks, works	lb.	.18	—
Hydrogen peroxide, 35%, dms., c.l., dlvd	lb.	.202	—
dms., l.c.l., dlvd.	lb.	.211	—
tanks, dlvd.	lb.	.1800-	—
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works	lb.	1.10	—
Tech., dms., c.l., dlvd.	lb.	.82½-	—
dms. l.c.l. dlvd	lb.	.84½-	—
Hydroquinone monomethyl ether, dms., t.l., dlvd	lb	2.59	—
dms., l.t.l., dlvd.	lb.	2.61	—
Hydroxyacetic acid, tech., 70% dms., Philadelphia and Chicago	lb.	.11	—
tanks, Belle W. Va.	lb.	.073	—
Hydroxycitronellol, cns.	lb.	4.85	5.75
Hydroxyethyl cellulose, add grades, fib. dms., 20,000-lb. lots or more, f.o.b shipping point	lb.	.84	—
fib. dms., 2,000 to 19,999-lb. lots, same basis	lb.	.89	—
fib. dms., 100 to 1,999-lb. lots, same basis	lb.	.93	—
fib dms., smaller lots, same basis	lb	1.03	—
Hyoscine salts (see Scopolamine).			
Hyoscyamine hydrobromide, bots.	oz.	7.75	8.50
Hyoscyamine sulfate, bots.	oz.	7.75	8.50
Hypophosphorous acid, purit., 50%, 10-cbys. f.o.b works	lb	1.93	—
NF, 50%, 10-cbys., same basis	lb.	1.35	—

I

Ichthammol, NF, dms.	lb.	.75	1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.)			
Indole, CP bots.	lb.	13.75	15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd	lb	4.50	—
Inositol, 50-lb. dms., less than 1,000 lb., dlvd	lb	4.75	—
10 lb cns., 10-50 lbs., dlvd	lb	5.00	—
5 lb bots., dlvd.	lb	5.25	—
Insect flowers (see Pyrethrum).			
Iodine, crude, kgs.	lb.	1.10	—
Resub., USP, dms., f.o.b. works	lb.	2.20	2.22
Iodochlorohydroquinolin, USP, dms.	lb.	3.60	—

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Iodoform NF dms. 300 lbs. f.o.b. works	lb	4.90	- —
dms 100-lbs. same basis	lb	5.05	- —
a-Ionone cns	lb	4.60	5.75
b-Ionone cns	lb	4.15	6.15
Ipecac root, whole bgs	lb	8.00	8.50
Powd bbls bxs	lb	9.50	10.00
Irish moss, bleached prime, bls	lb	.25	.27
Iron blue alkali resisting, bbls., c.l., dlvd E	lb	.57	- —
bbls l.c.l. ton lots same basis	lb	.58	- —
bbls smaller lots, same basis	lb	.59	- —
Dom reg bbls, c.l. dlvd E	lb	.52	- —
Iron blue alkali resisting dom., reg. bbls l.c.l. ton lots, same basis	lb.	.53	- —
bbls, l.c.l. smaller lots same basis	lb	.54	- —
Imp British reg, bbls, c.l. dlvd. E	lb.	.48	- —
bbls, l.c.l. ton lots same basis	lb	.49	- —
bbls., l.c.l. smaller lots, same basis	lb	.50	—

Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont. Wyo. Utah Col and Nev.

Iron compounds (see Ferric or Ferrous).

Iron oxide, black, pure bgs., c.l., works	lb.	.14¾-	—
bgs., l.c.l., works	lb.	.15	
Iron oxide, brown, pure bgs., c.l., works	lb	.14¼	—
bgs., l.c.l., works	lb	.14½	—
Iron oxide, metallic, brown, bgs., works	lb.	.05½-	—
Iron oxide Persian Gulf, red., bgs., c.l., works	lb.	.08¾-	—
Iron oxide, red, dom., pure bgs., Bethlehem, E St. Louis, New York City	lb.	.14¼-	—
Iron oxide, red nat., 75-85% ferric oxide, bgs., c.l., works	lb.	.08¼-	—
bgs., l.c.l., works	lb.	.06½-	—
Iron oxide, Spanish red, bbls., c.l., ex dock	lb.	.05¾	Nom.
bbls., l.c.l. ex dock	lb.	.06	Nom
bbls., l.c.l., ex whse, New York	lb	06½	Nom.
Iron oxide yellow nat., French type, bgs., c.l., works	lb.	.06¾-	.07
Peruvian type, bgs., l.c.l	lb	.023	.024
Iron oxide, yellow pure, light lemon shade bgs c.l. works	lb	.12¼	—
other shades, same basis	lb.	.12 -	.12½
Isoamyl alcohol, dms., c.l., works, frt. alld E	lb	27½-	—
dms., l.c.l., same basis	lb	29 -	—
tanks same basis	lb	25	—
Isoborneol cns	lb	1.44	1.80
Isobornyl acetate cns	lb	46	56
Isobornyl formate, dms	lb.	1.15 -	1.20
Isobornyl propionate, dms	lb.	1.20 -	1.25
Isobutyl acetate, perfume grade cns	lb.	.30 -	.35
Isobutyl acetate, solvent grade, dms. c.l., dlvd E of Rockies	lb.	.15¼-	—
dms., l.c.l., same basis	lb.	.16¾-	—
tanks same basis	lb	.12¾-	—
Isobutyl alcohol, dms., c.l., dlvd	lb.	.15½-	—
dms., l.c.l., dlvd.	lb.	.17 -	—
tanks, dlvd	lb.	.13 -	—
Isobutylene, 99%, tanks, works	gal.	.38 -	—
Isobutyl isobutyrate, dms., f.o.b. works	lb.	.75 -	—
Isobutyraldehyde, CP, dms., c.l., dlvd	lb.	27½-	—
dms., l.c.l., dlvd.	lb.	.28½-	—
Tech., dms., c.l., dlvd.	lb.	.22 -	—
dms., l.c.l., dlvd.	lb.	.23 -	—
tanks, dlvd.	lb.	.19½-	—
Isobutyric acid, dms., c.l., t.l., dlvd.	lb	.35 -	—
dms., l.c.l., t.l., same basis	lb.	.36½-	—
t.c., t.t., same basis	lb.	.33 -	—
Isobutyronitrile, dms., c.l., dlvd.	lb.	.47½-	—
dms., l.c.l., dlvd	lb.	.48½-	—
tanks, dlvd.	lb.	.45 -	—
Isoeugenol cns.	lb.	3.40 -	4.25
Isoniazid, powd., bulk, 50 kilos	kilo.	12.00 -	—
Isonicotinic acid, 100-lb fib. dms., works	lb.	4.25 -	—
Isonicotinic acid hydrazide (see Isoniazid).			
Iso-octyl alcohol, dms., c.l., dlvd. E	lb.	.23½-	—
dms., l.c.l., dlvd. E.	lb.	.25 -	—
tanks, dlvd E	lb.	.21 -	—
Isopentane, com'l. grade, tanks, f.o.b. Tex. refy	gal.	.16½-	—
Isophorone, dms., c.l., dlvd	lb.	.24½-	—
dms., l.c.l., dlvd	lb.	.25¼-	—
tanks, dlvd.	lb.	.22½-	—
Isophthalic acid, dms., c.l., works, frt equald	lb.	.18 -	—
dms. l.c.l., same basis	lb.	.19 -	—
Isopropanol (see Isopropyl alcohol).			
Isopropyl acetate, dms., c.l., dlvd.	lb.	.14 -	—
dms., l.c.l., same basis	lb.	.15½-	—
tanks, same basis	lb.	.11½-	—
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd	gal.	.58 -	—
dms., l.c.l., dlvd.	gal.	.68 -	—
tanks, dlvd.	gal.	.42 -	—
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd	gal.	.60 -	—
dms., l.c.l., dlvd.	gal.	.70 -	—
tanks, dlvd.	gal.	.44 -	—
anhyd., c.l., dlvd.	gal.	.62 -	—
dms., l.c.l., dlvd.	gal.	.72 -	—
tanks, dlvd	gal.	.46 -	—
Isopropyl benzene (see Cumene).			
Isopropyl ether, dms., c.l., dlvd	lb.	.09½-	—
dms., l.c.l., dlvd.	lb.	.11 -	—
tanks, dlvd	lb.	.07 -	—
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l., works	lb.	1.00 -	—
dms., l.c.l., works	lb.	1.05 -	1.25
tanks, works	lb.	.99 -	—
Isopropylamine (see Mono, Di, or Tri-).			
Isopropyl-N-phenyl carbamate, 450-lb fib dms. c.l., t.l., works	lb.	.75 -	—
450-lb. fib dms., l.c.l., works	lb.	.80 -	.90
Isoquinoline, dms., works	lb.	.65	1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works	lb.	.49½-	—
bgs., l.c.l., same basis	lb.	.50½-	—
Tech., bgs., c.l., same basis	lb.	.34½-	—
bgs., l.c.l., same basis	lb.	.35½-	—

J

J acid, paste bbls., works, 100% basis	lb	2.70 -	—
Powd., bbls., same basis	lb	2.75 -	—
Jalap root, NF bls	lb	.60	—
NF, powd., bbls. bxs.	lb	.70	.75
Japan wax, cs.	lb	.29	.31
Juniper berries, bgs.	lb	.16	.17
Juniper berry oil, NF, bots.	lb	2.90 -	3.75
Twice rectified, bots	lb	3.25	—
Juniper tar oil, NF, dms.	lb	.42	.60
Juniper wood oil, tech., cns.	lb.	.38	.55

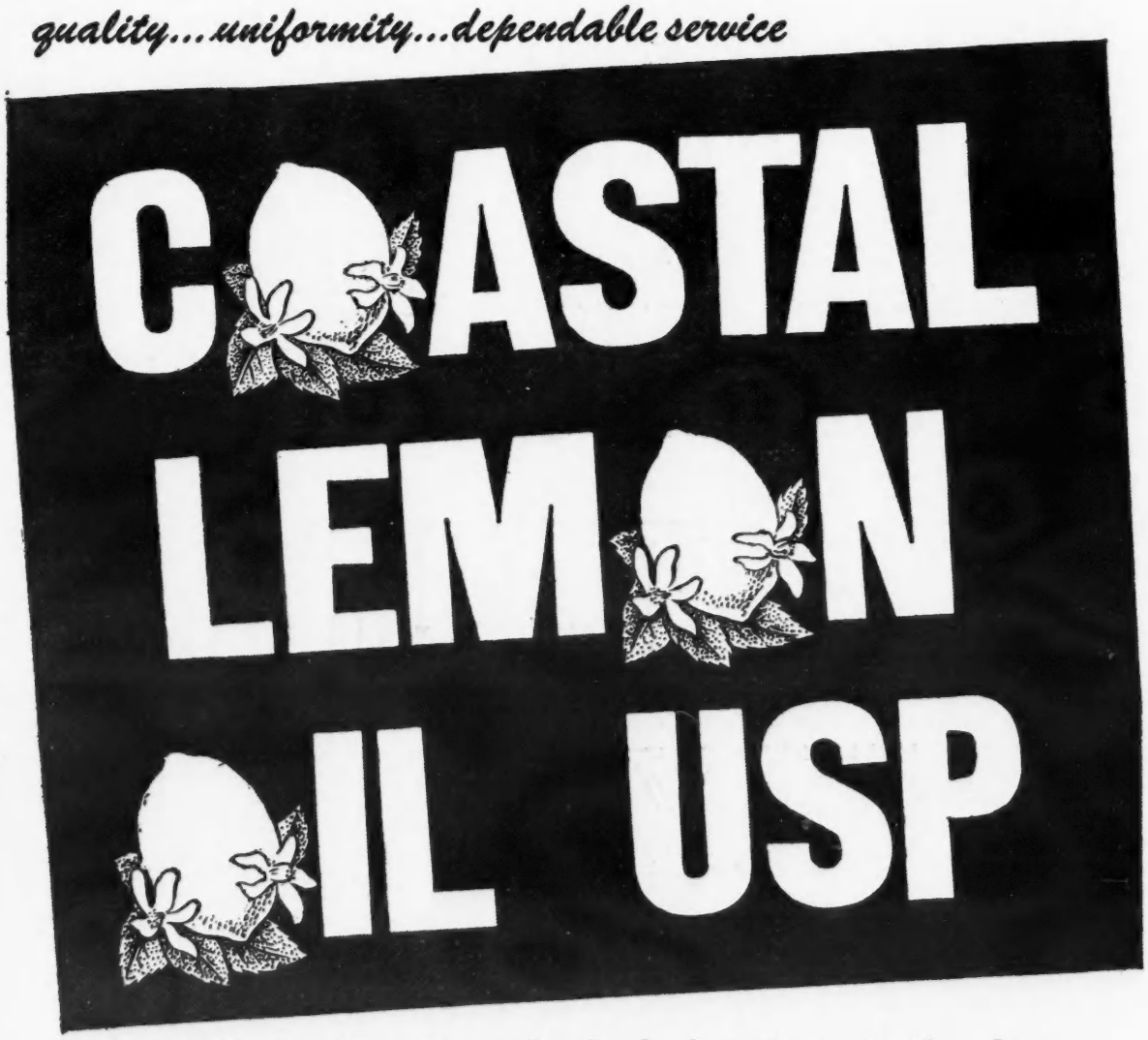
K

Kaolin (see also Clay, China).			
Kaolin NF, powd., fib. dms	lb.	.10 -	.12
NF colloidal 50-lb bgs	lb	15½	.17½
Karaya gum, No 1, NF, powd., bls	lb.	.48	.50
No. 2, powd. bbls.	lb.	.43	.45
No. 3, powd. bbls	lb.	.37	.40
Koch acid, bbls., frt. alld., 100% basis	lb	1.00	—
Kola nuts, bgs.	lb.	.11 -	.12

L

L acid, bbls., works	lb.	1.25 -	—
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York	gal.	.20 -	—
Group 3	gal.	.15125-	—
Houston, Texas	gal.	.16 -	—
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York	gal.	.20 -	—
Group 3	gal.	.14125-	—
Houston, Texas	gal.	.16 -	—
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald	lb.	.1985-	—
bbls., dms., 20 or more, frt. equald	lb.	.2035-	—
bbls., dms., 5 to 19, frt. equald.	lb.	.2085-	—
bbls., dms., 1 to 4, frt. equald.	lb.	.2135-	—
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald	lb.	.3335-	—
bbls., dms., 20 or more, frt. equald	lb.	.3385-	—
Lactic acid edible, 80% bbls., dms., 5 to 19, frt. equald	lb.	.3435-	—
bbls., dms., 1 to 4, frt equald.	lb.	.3485-	—
Plastic grade, 50%, c.l., bbls., works	lb.	.2740-	—
bbls., 20 or more, works	lb.	.2790-	—
bbls., 5 to 19, works	lb.	.2840-	—
bbls., 1 to 4, works	lb.	.2890-	—
80%, bbls., c.l., works	lb.	.4625-	—
bbls., 5 to 19, works	lb.	.4725-	—
bbls., 1 to 4, works	lb.	.4775-	—
Lactic acid, tech., 44%, bbls., c.l., works, 100 lbs.		12.45 -	—
bbls., l.c.l., works, 100 lbs.		12.85 -	—
USP, 85%, chys.	lb.	.85 -	—
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt. equald	lb.	.14 -	—
bgs., 6,000-lb lots, frt equald	lb.	.14½-	—
bgs., 2,000-lb lots, frt equald	lb.	.14¾-	—
bgs., 200-lb lots, frt. equald	lb.	.15¼-	—
Edible lactose in fib dms., ½c higher.			
Lactose, ferment, grade, bgs., c.l., works	lb.	.08½-	—
Lactose, USP, reg., fib dms., 30,000-lb. lots, frt. equald	lb.	.21½-	—
fib. dms., 2,000-lb. lots, frt. equald	lb.	.22¼-	—
200-1,880-lb. lots, frt. equald	lb.	.22¾-	—
USP lactose in bags ½c to 1c lower.			
Lactose, USP, spray dried, bgs., t.l., frt. equald	lb.	.18½-	—
bgs., l.t.l., frt. equald	lb.	.19 -	.19¾
Lady's slipper root, bls.	lb.	3.00 -	3.50
Lamp black, bgs., c.l., works	lb.	.16 -	.45
Lanolin, USP, anhyd., 400-lb dms., works	lb.	.24 -	.26
USP, annyd., cosmetic, 400-lb. dms., works	lb.	.26 -	.30
USP, hydrous, 400-lb dms., works.	lb.	.20	—
Lard, cash, dms., Chicago	lb.	.1005-	—
Lard oil (see Grease oil).			
Larkspur seed, bgs.	lb.	.55 -	—
Laurel leaf oil, dms., cns.	lb	9.75 -	12.50
Laurent's acid, bbls	lb.	.70	—
Lauric acid, pure, dms	lb.	.32¼-	.34¾
tanks	lb.	.29¾-	—
Lauryl alcohol, bots	lb.	2.00 -	2.50
n-Lauryl methacrylate, dms., c.l., t.l., works	lb.	.65½-	—
dms., l.t.l., works	lb.	.66 -	—
Lavandin oil, 22-24%, dms.	lb.	1.10 -	1.50
Abrial, dms.	lb.	1.12 -	—
Lavender flowers, medium, bls	lb.	.55 -	.60
Ord., bls.	lb.	.20 -	.25
Select., bls.	lb.	.90 -	1.00
Lavender flower oil, USP, French, 35-37% ester, cns	lb.	1.85 -	4.00
40-42% ester, cns	lb.	5.00 -	7.75
Spike, Spanish, cns.	lb.	2.20 -	3.00
Lead acetate, NF, cryst., gran., powd., bbls	lb.	.34½-	—
White, cryst., bbls.	lb.	.25½-	—
gran., bbls.	lb.	.26½-	—
powd., bbls	lb.	.26½-	—
Lead arsenate acid powder, dealers, 3-50-lb bgs or any quantity, frt. alld. on $150 or more	lb.	.30¼-	—
1-lb bgs., same basis	lb.	.47 -	—
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld	lb.	.17 -	—
bbls., l.c.l., same basis	lb.	.18 -	—
Lead carbonate (see Lead, white, basic carbonate).			
Lead chloride, dms	lb.	.52 -	—
Lead iodide NF, 5 lots	lb.	3.82 -	—
Lead linoleate, fused, 26.5% Pb, dms.	lb.	.38 -	—
Lead metal prime, pigs, New York	lb.	.12 -	—
St. Louis	lb.	.1180-	—

quality...uniformity...dependable service



PURE California cold pressed lemon oil produced under continuous scientific quality control . . . bulk blended for uniformity, from desert and coastal grown lemons . . . packaged in tamper-proof containers for your protection . . . and priced to save you money. Our research and laboratory facilities have helped many users with product improvement and cost reduction...perhaps we can help you.

VENTURA PROCESSORS, Ventura, California

DISTRIBUTED BY:

International Flavors & Fragrances, Incorporated
417 Rosehill Place, Elizabeth 2, New Jersey

Ventura Processors, 2325 Vista Del Mar Drive, Ventura, California

Lead monosilicate, dry, c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .19½- —
24% Pb., dms., dlvd. lb. .24¼- —
Solid, 37% Pb., dms., dlvd. lb. .31¾- —
Lead nitrate, bbls. lb. .24¼- .36¾
Lead orthosilicate gel., 50-60% PbO_2, dms., works lb. .29¾- .34¾
Lead peroxide, tech. powd., bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works, lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald. lb. .1475- —
bbls., l.c.l., same basis lb. .1575- —
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis lb. .1495- —
bbls., l.c.l., same basis lb. .1595- —
Lead, red, 98% Pb_3O_4, bbls., c.l., same basis lb. .1510- —
bbls., l.c.l., same basis lb. .1610- —
Lead, resinate, precip., 23%Pb, dms., lb. .49 - —
Lead salicylate, normal dms. works lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms lb. .17¼- —
24% Pb, dms lb. .21¼- —
Solid, 30% Pb, dms lb. .26¾- —
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 - —
bgs., l.c.l., same basis lb. .19 - —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs. l.c.l., same basis lb. .17½- —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works, lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
Lecithin, edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. package, works lb. 6.45 - —
Lemon oil, USP, Calif., ens., dms. lb 1.25 - 1.50
Messina ens. lb 3.25 4.00
Lemongrass oil, ens., dms. lb. 2.10 - —
dl-Leucine, dms., 1 kilo, works kilo 50.00 - —
Licorice root, gran., bbls. lb .13 - —
Powd., bbls. lb. .15 - .16
Whole, bbls. lb. .09 - .10
Lignaloe wood oil, Mexican, ens lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).
Lilac oil lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs. works, E. ton 14.25 - —
Chemical, hydrated, bgs., c.l. same basis ton 17.25 - —
spray, bgs., c.l., same basis ton 18.25 - —
For New York delivery, add $6.29 freight charge
Lime oil, dist., Mexican, ens lb. 5.35 - 5.60
West Indian, ens. lb. 5.00 - 5.60
Expressed West Indian, ens lb 7.75 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool ex bois de rose oil, dms. lb. 2.45 4.25
Syn., 98-100%, dms., works lb. 2.40 2.75
Linalyl acetate ex bois de rose, 90-92%, dms lb. 2.65 4.50
96-98%, dms. lb 3.25 - —
Syn., 98-100%, dms., works lb. 2.75 - —
Lindane, 25% formulation, to distributors, dms., frt. alld. lb. 1.35 - 1.50
Lindane, tech., to formulators, 250-lb. dms., 5,000 lbs., dlvd. lb. 2.13 - —
100-lb. dms., 5,000-lbs., dlvd. lb. 2.15 - —
250-lb. dms., less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb. dms., less than 5,000-lbs., dlvd. lb. 2.20 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls. lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis mills ton. 57.00 - —
Extracted, 34% bulk, same basis. ton. 52.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1590- —
dms., l.c.l., New York lb. .1680- .1730
tanks, f.o.b Minneapolis lb. .1230- —
tanks, New York lb. .1341- —
tankwagon, New York lb. .1401- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil, acid, dist., dms lb. .1980- —
Water-white, dms. lb. .2280- —
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .1425- —
bbls., l.c.l., same basis lb. .1525- —
Lithium aluminum hydride, lump, dms., works lb. 33.00 - 39.00
Lithium benzoate, dms. lb. 1.65 - 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30¼
Tech., dms., c.l., frt. alld lb. .67 - —
dms., t.l., same basis lb. .73 - —
dms., ton lots, same basis lb. .76 - —
dms., smaller lots, f.o.b., plant. lb. .81 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms., l.c.l., same basis lb. .88 - .92
Lithium citrate, NF, dms., ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb. 1.75 - —
bbls., ton lots and more, dlvd lb. 1.85 - —
bbls., less ton lots, dlvd lb. 1.90 - —
Lithium hydride, powd., dms., 500-lbs. lots or more, works. lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .72 - —
dms., l.c.l., frt. alld. lb. .73 - —
Lithium manganite, dms., works lb. .95 - 1.05
Lithium nitrate, tech., dms., 100-lb. lots lb. 1.15 - 1.25
Lithium salicylate, dms. lb. 1.60 - 1.70
Lithium silicate, dms., works lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works lb. .48½- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —

Lithol-rubine red toner, pure, bbls., works lb. 1.50 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08¾- —
bgs., l.c.l., dlvd. E lb. .09¼- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l., dlvd. lb. .12 - —
Lobelia herb, bls. lb. 1.10 - 1.15
Lobeline sulfate, bots., 50-oz. lots, works oz. 30.00 - —
Locust bean gum, powd., bgs. lb. .35 - .40
Lycopodium, cs. lb. 3.25 - 3.50
1-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Siauw, No. 1, bls lb. 1.60 - —
No. 2, whole, bls. lb. 1.40 - —
siftings, bls lb. 1.35 - —
Mace oil, dist., cns., dms lb. 9.00 - 11.00
Magnesia, calcined, tech., bgs., c.l.a., frt. equald lb. .25¾- .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Lunning, Nev ton. 39.50 - —
91%, bgs., c.l., same basis. ton. 49.50 - —
95%, bgs., c.l. same basis. ton 59.00 - —
USP, light, bgs. lb. .36½- .37½
USP, heavy, bgs. lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton. 36.25 - —
Chemical grade, deadburnt, standard grain, bulk., c.l., Chawelah, Wash. ton. 46.00 - —
Magnesium bromide, 80-lb. dm., f.o.b. works lb. 1.15 - —
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13¼- —
bgs., t.l., frt. equald lb. .14 - —
bgs., l.c.l., frt. equald lb. .15 - 16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works ton. 60.00 - —
bgs., l.c.l., works ton. 75.00 - 100.00
Magnesium gluconate 100-lb. dm., f.o.b. works, E. lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., l.t.l., frt. alld. lb. .23½- —
tanks, frt. alld. lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, frt. alld on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb .10¼- .13
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs, l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs., smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots lb. .40 - —
fib. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green, straight, PTA, bbls., works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

M. C. P.
Pure
Unadulterated
California
LEMON OIL
U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by
MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Maleic Anhydride—Methyl Methacrylate

Maleic anhydride, dms., c.l., frt. equald lb. .24 - —
dms., l.c.l., frt. equald lb. .25½- —
tanks, frt equald lb .22½- —
Maleic anhydride in bags ½c. per lb. less.
Malic acid, tech., dms lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb lots lb 2.35 - —
dms, smaller lots lb 2.40 2.50
Mandrake root, bls. lb. .45 - —
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.53 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd. E. lb. .34½- —
dms., ton lots, dlvd. E. lb. .37 - —
dms., smaller lots, dlvd E. lb. .39 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld. lb. .29¾- —
Manganese resinate, fused, 3½% Mn. dms lb. .29¼- —
Precip., 6½-7% Mn, dms. lb. .42 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd., S., E ton.86.50 - —
bgs., l.c.l., dlvd. S., E ton.93.50 - —
Manganese tallate, 6%, dms. lb. .26½- —
Manila copal gum, C, bgs. lb. .35 - .39
DBB, bgs. lb. .25 - .28
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 - .24
WS, bgs. lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms., to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms. lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 - —
Menadione, USP bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .06 - —
Menthol, nat., USP, Brazilian, large crystals, cs lb. 9.00 - —
Nat., USP, Brazilian, regular crystals, cs. lb. 8.85 - —
Japanese, cs lb.12.00 - —
Syn., USP, racemic, 25-lb. lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs., fib. dms., less ton lots, same basis lb. .48 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 - —
bgs., fib. dms., less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb 4.03 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb 3.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb. 5.84 - —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works lb 6.97 - —
Mercuric oxide, red, NF IX, 50-lb. dm., 100 lbs. f.o.b works. lb. 4.72 - —
tech., 50-lb. dm., 100 lbs., same basis lb. 4.52 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis. lb 4.89 - —
tech., dms., 100 lbs lb 4.35 - —
25-lb. fib dm. lb. 4.38 - —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF, 100-lb. dm. f.o.b works lb 8.22 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask, net-flask.209.00 -212.00
Mesityl oxide, dms., c.l., dlvd lb. .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid dms., works lb. .57 - .58
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads frt. equald lb. .42½- —
dms., smaller lots, frt. equald. lb. .43 - .78
tanks, works, frt. equald lb. .40 - —
tanks, frt. alld gal. .85 - —
Methanol, nat, denaturing grade, Syn., zone 1, dms., c.l., or t.l. min., dlvd gal. .51½- —
dms., l.c.l., dlvd. gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
Methanol, syn., zone 2, dms., c.l., or t.l., min. frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal. .34 - —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb.27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt alld. lb 1.10 - —
dms., t.t.l., same basis lb 1.16 - —
dl-Methionine, fib. dms., frt. alld., 50-lb or more lb 3.50 - —
Feed grade, 98% fib dms., same basis lb. 1.43 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret. dms., l.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis. lb. .24 - .24½

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½- —
Methyl acetone, syn., dms., c.l., frt. alld. E gal. .66 - —
dms., l.c.l., frt. alld. E. gal. .76 - —
tanks, frt alld. E. gal. .51 - —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .36¼- —
dms, l.t.l., dlvd. lb. .35¼- —
tanks, dlvd. lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .17 - —
dms., l.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
N-Methylaniline, tech., tanks, frt. alld. lb. .60 - —
Methylanthranilate, cns. lb. 2.25 - 2.45
Methyl benzoate, cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld. lb. .62 - .72
on 100 lbs. lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs lb. 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld. lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Methyl chloride, refrigerator mfrs., cyls., dlvd. lb. .48¾- —
Other consumers or service men, cyls., dlvd. lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works. lb. .21½- —
100-lb. multiwall paper bgs., l.t.l., works lb. .23 - —
Methyl heptin carbonate, bots. lb.27.75 -31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isoamyl ketone, dms., c.l., dlvd. lb. .20 - —
dms., l.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —

It's only common sense to look at *all* raw material costs—alcohol costs, for example. Here is where lower price methanol may be able to deliver real savings over the alcohol you're now using.

How much can methanol help to reduce manufacturing and processing costs? Plenty, when you consider that the total market for the big 3 alcohols is in excess of 4 billion lbs. annually. Methanol, the lowest cost of the three, often can offer definite advantages when used in place of isopropanol in automotive chemicals, laminates, pharmaceutical extractions, metal cleaning and petroleum processing . . . and in place of ethanol in petroleum processing, as a dye solvent, and in film manufacture. What's your share of these potential savings? Write for Product Bulletin S-03-6, or check with your Celanese representative or distributor. They can give you money-saving facts about Celanese Methanol, and answer your specific questions. Celanese Chemical Company, a Division of Celanese Corporation of America, Dept.656-K,180 Madison Avenue, New York 16. Celanese®

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NOW IN AMPLE SUPPLY

NADIC® Methyl Anhydride

Liquid Epoxy Curing Agent with 6 Big Practical Advantages

New production capacity makes National Nadic Methyl Anhydride amply available at an attractive price. Already widely used by many of the most-experienced epoxy resin formulators, this effective curing agent has these 6 big advantages:

1. *Ease of handling* because it is a clear, colorless, low-viscosity liquid that is very easily mixed with liquid epoxies at, or slightly above, room temperature.
2. *Light-colored clear castings.*
3. *Longer pot life of catalyzed resins*—shelf life in molding compositions as much as two months without activator!
4. *Lower volatility* during cure, lower peak exotherms and greater control of cure at moderate initiating and post-cure temperatures.
5. *Excellent thermal stability* of cured resins due to high heat-distortion temperature imparted by this unique curing agent.
6. *Greater latitude in formulations* both for required heat distortion temperature and hardness of finished casting.

TECHNICAL DATA AND SAMPLE AVAILABLE NOW

Write today for Technical Data Sheet 61159A, working sample and quotation on Nadic Methyl Anhydride — the preferred epoxy curing agent.

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Allied Chemical

Methyl Naphthyl Ketone—b-Naphthol

Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 • —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms lb 6.90 • —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., l.c.l., same basis ..... lb. .62½- .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.32 • —
5-39 dm. lots, same basis ..... lb. 1.37 • —
tanks, same basis ..... lb. 1.27 • —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 • —
Tungstated, PTMA, bbls., same basis lb. 4.35 • —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted ..... lb. 3.25 • —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., t.t.l., dlvd ..... lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼- —

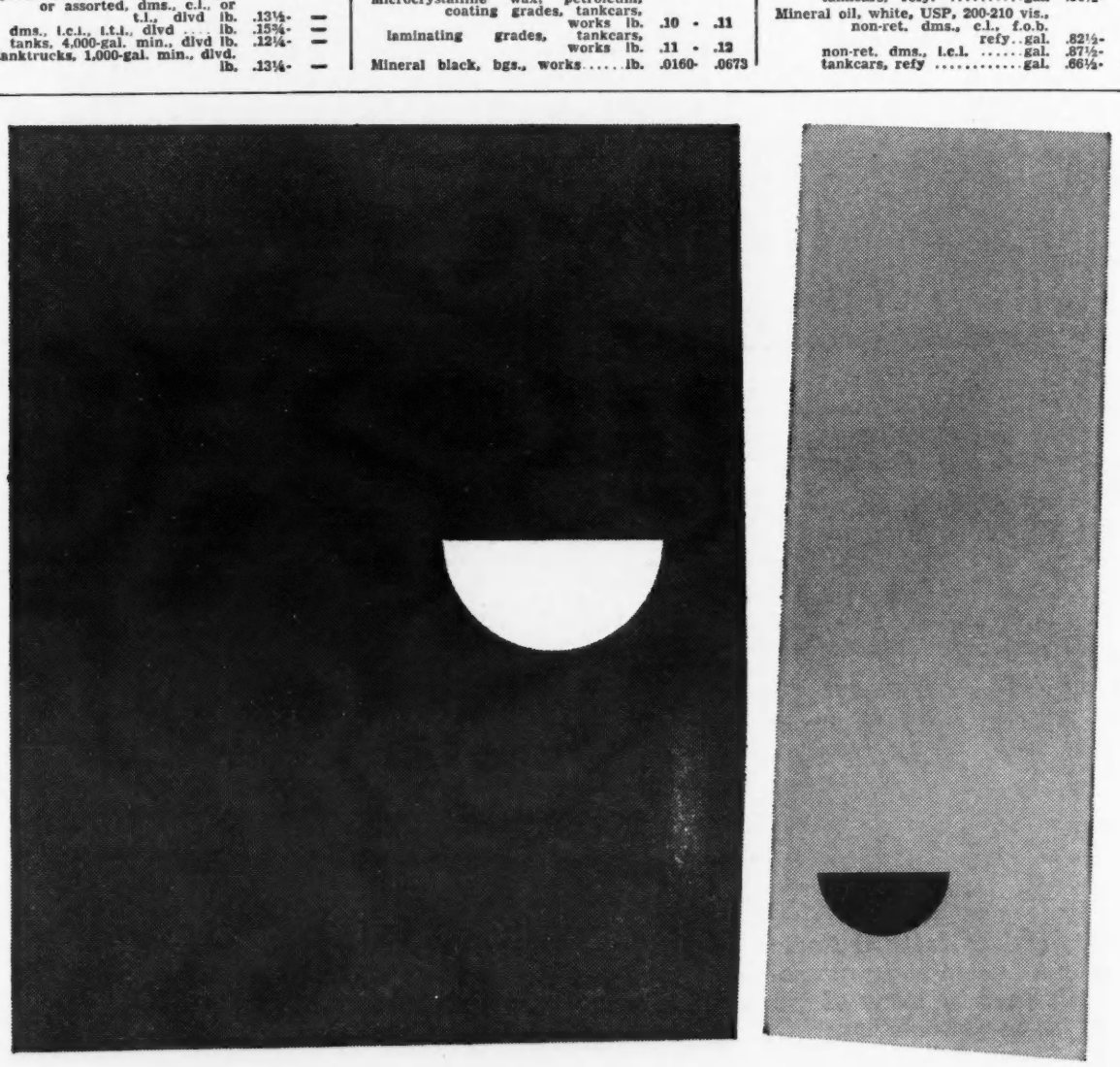
b-Methylnaphthalene, 32°C., m.p., dms., works lb .80 • —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .64 • —
roofing, 20 to 80 mesh, works lb. .03 • —
wet-grd., biotite, bgs., c.l., works, frt. alld.E lb. .06½- —
bgs., l.c.l., ex-whse. ..... lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse or freight alld. E lb. .09 • —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 • —
bgs., l.c.l., ex-whse, or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld.E lb. .08¾- —
bgs., ex-whse. or frt. alld. E. lb. .09 • —
white, 5-10 microns, bgs., c.l., works, frt. alld. E.... lb. .08¼- —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 • .11
laminating grades, tankcars, works lb. .11 • .12
Mineral black, bgs., works ..... lb. .0160- .0673

Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy. gal. .68 • —
50-65 vis., non-ret. dms., l.c.l., basis. gal. .70 • —
tankcars, refy. ..... gal. .49 • —
Mineral oil, white, tech., 65-75 vis., non-ret. dms., c.l., same basis. gal. .65 • —
non-ret. dms., l.c.l., same basis. gal. .70 • —
tankcars, refy. ..... gal. .49 • —
NF, 80-90% vis., non-ret. dms., c.l., same basis. gal. .66 • —
non-ret. dms., l.c.l., same basis. gal. .71 • —
tankcars, refy. ..... gal. .50 • —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., c.l., same basis. gal. .72 • —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., l.c.l., same basis. gal. .77 • —
tankcars, rfy. ..... gal. .56 • —
Mineral oil, white, NF, 145-155 vis., 5 non-ret. dms., c.l., same basis. gal. .78 • —
non-ret. dms., l.c.l., same basis. gal. .83 • —
tankcars, refy. ..... gal. .62 • —
Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis. gal. .80½- —
non-ret. dms., l.c.l., same basis. gal. .85½- —
tankcars, refy. ..... gal. .64½- —
Mineral oil, white, USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy. gal. .82½- —
non-ret. dms., l.c.l. ..... gal. .87½- —
tankcars, refy ..... gal. .66½- —

Mineral oil, white, USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy. gal. .87½- —
non-ret. dms., l.c.l. ..... gal. .92½- —
tankcars, refy. ..... gal. .71½- —
(For f.o.b N. Y. add 2c. for tankcars; 2c. for c.l., and 3c. for l.c.l. non-ret. dms.).
Mineral orange, American, bbls., c.l., works. lb. .17 • —
bbls., c.l., same basis ..... lb. .18 • —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 • —
New York ..... gal. .305 • —
Houston, Texas ..... gal. .25 • —
regular, tankcars, New Jersey and New York. gal. .18 • —
Group 3 ..... gal. .12875- —
Houston, Texas ..... gal. .145 • —
Mineral spirits, 140 F, flash, New York, New Jersey at terminal. gal. .205 • —
Houston, Texas .... gal. .17 • —
Mink oil, dms. ..... lb. 2.75 • —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works. lb. 6.30 • —
Molasses, blackstrap, feed grade, tanks, New Orleans. gal. .12½- .13
tanks, New York. gal. .13½- .14
Molybdated orange, bbls. ..... lb. .49 • —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 • —
325 mesh, ctns., works ... kilo. 9.13 • —
Molybdenum trioxide, purif., dms., works lb. 1.15 • —
Tech., chemical, dms., works, basis Mo content lb. 1.48 • —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 • —
Molybdic acid, 85%, dms., works. lb. 1.05 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 • —
dms., c.l., dlvd. ..... lb. .995 • —
tanks, dlvd. ..... lb. .96 • —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½- —
dms., l.c.l., same basis ..... lb. .59 • —
tanks, same basis ..... lb. .55 • —
Mono-tert-butyl-m-cresol, dms., c.l., works. lb. .55 • —
dms., l.c.l., works ..... lb. .56 • —
tanks, works ..... lb. .54 • —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½- —
dms., l.c.l., same basis ..... lb. .11½- —
tanks, same basis ..... lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis ..... lb. .29 • —
tanks, same basis ..... lb. .25 • —
Monoetnyialphanaphthylamine (see
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis. lb. .40 • —
tanks, dlvd. E., 100% basis lb. .35 • —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis ..... lb. .29 • —
tanks, same basis ..... lb. .25 • —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., l.c.l., same basis ..... lb. .35 • —
tanks, same basis ..... lb. .31 • —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 • —
tanks, 100% basis ..... lb. .26 • —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 • —
Monomethylamine, 30-35% soln., dms., l.c.l., frt equald, 100% basis lb. .36½- —
tanks, frt. equald., 100% basis. lb. .26 • —
40% soln., dms., frt. equald., 100% basis lb. .33 • —
dms., l.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis lb. .26 • —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 • —
bgs., l.c.l., dlvd. E ..... lb. .32 • —
Monopotassium glutamate, dms., 1,000-lb lots, frt. alld lb 3.05 • —
dms. 100-lb lots, same basis lb. 3.25 • —
Monosodium glutamate, dms., dlvd. lb. 1.07 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs lb. .27 - .28
Imp., crude, Bohemian, bgs ... lb. .25 - .26
German, bgs ..... lb. .25 - .26
Morphine, cns., 100-oz., f.o.b. works. oz. 12.35 • —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 • —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 • —
Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz. 9.90 • —
Morpholine, dms., c.l., dlvd. E lb. .55¼- —
dms., l.c.l., dlvd. E ..... lb. .56¼- —
tanks, dlvd. E ..... lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots. lb. 4.40 - 4.90
cns., 25-lb lots lb. 4.50 - 5.00
Ketone fib. dms., 100-lb. lots lb. 4.60 - 5.10
cns., 25-lb. lots ..... lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.26 • —
cns., 25-lb lots ..... lb. 1.40 • —
Mustard seed, Danish, yellow, bgs. lb. .12 • —
Montana, yellow, bgs ..... lb. .10½- —
Oriental, bgs ..... lb. .08 • —
Mustard, oil, syn., bots ..... lb. 1.60 1.85
Myristic acid, bgs. ..... lb. .25¼- .27¼
tanks ..... lb. .24¼- —
Myrrh gum, cs ..... lb. .65 - .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York ..... gal. .19 • —
Group 3 ..... gal. .13875- —
Houston, Texas ..... gal. .155 • —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .06 • —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald ..... lb. .13½- —
tanks, same basis ..... lb. .10¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .15¼- —
cs., 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis. lb. .18½- —
a-Naphthol, dms., frt. alld ..... lb. 1.02 • —
b-Naphthol, tech., flake. bbls., c.l., works lb. .34 • —
bbls., l.c.l., works ..... lb. .36 • —



Looking toward tomorrow, visualizing the shapes and courses it will take, anticipating its needs... this search for ways to serve industry better and more fully has been an unremitting spur to Sonneborn, since many tomorrows ago. Inasmuch as this quest dates back to the turn of the century and has been concentrated upon a specialized segment of petroleum refining, it is not surprising that in products, technical assistance, service, Sonneborn Goes Further.

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SPECIALISTS IN PETROLEUM SULFONATES (PETRONATES) • WHITE MINERAL OILS • PETROLATUMS
WO-11

We have changed our name from L. SONNEBORN SONS, INC. to SONNEBORN CHEMICAL AND REFINING CORPORATION

Naphthol, ITR, red toner, bbls., works lb. 5.00 • —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld. lb. .52 • —
b-Naphthylamine tech., flake, bbls., works lb. 1.60 • —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib dms. lb. 8.50 • —
Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen USP dms., frt. adjusted lb. 7.00 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 • —
fib. dms. 100-999-gram lots, basis activity gram. .30 • —
Tech., fib dms gram. .13½ • —
Neopentylglycol dms., c.l., dlvd lb. .32 • —
dms. l.c.l. same basis lb. .33 • —
Nerol, dms. lb 4.75 —
Neroli oil, NF, French, bots. lb. 425.00 575.00
Tunisian, bots. lb. 400.00 —
Nerolin, cns. lb. 2.45 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.40 —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .68½ .75½
Nickel carbonate bbls., dlvd lb. 78¼ .85¼
Nickel chloride, bbls. dlvd. lb. .37 .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 .73
Nickel metal electro cathodes, cs., works lb .74 —
Nickel nitrate, dms., frt. alld. lb. .31½ .33½
Nickel oxide, black, bbls. lb. .85 • —
Green, bbls lb. .84 • —
Nickel sulfate, bgs., c.l., dlvd. lb. .28 • —
bgs., l.c.l., dlvd. lb. .28½ .36
Nicotinamide, USP, 50-kilo., dms., 100 kilos., dlvd kilo. 6.50 • —
dms., less than 100 kilos, dlvd. kilo. 6.60 7.00
Nicotine sulfate 40%, dealers, 50-lb. dms. frt. alld lb. 1.20 • —
40%, manufacturers, 500-lb. dms., frt. alld lb. 1.05 • —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .10¼ —
Nikethamide, cbys. lb. 5.00 • —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 • —
cbys., t.c.l., works E 100 lbs. 6.05 6.85
38° Be., cbys. c.l., works E. 100 lbs. 6.25 —
cbys., t.c.l., works E 100 lbs. 6.55 7.35
40° Be. cbys. c.l., works E. 100 lbs. 6.75 —
cbys., t.c.l., works E 100 lbs. 7.05 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 —
cbys., t.c.l., works E 100 lbs. 7.55 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 • —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 • —
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works lb. .18½ —
cbys. extra t.c.l. works. lb. .20 • —
5-pint bots. extra, cs., c.l., same basis lb. .22½ —
5-pint bots. extra, cs., l.c.l., same basis lb. .24 .25
dms., frt alld lb. .99 • —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 • —
Paste, dms. frt. alld., 100% basis. lb. 1.10 • —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 • —
dms., t.c.l., frt alld lb. .51 • —
o-Nitroaniline orange toner, kgs. lb 1.35 • —
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., dlvd. lb. .44½ —
dms., t.c.l., same basis lb. .46½ —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 • —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 • —
Nitrobenzene, dbl dist., dms., c.l., frt. alld lb. .13 • —
dms., t.c.l., frt. alld. lb. .14 • —
tanks, frt. alld lb. .11 • —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 • —
4-Nitro-2-aminophenol, tech., paste, dms., t.c.l., works lb. .64 • —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½ —
bbls., t.c.l., same basis lb. .33½ .40½
18-20, cps., bbls., c.l., same basis lb. .39½ —
bbls., t.c.l., same basis lb. .40½ .42½
250-400, 600-1,000 seconds, bbls., t.c.l., same basis lb. .43 • .46
Nitrocellulose, spirit soluble, 30-35 cps. ¼, ½ seconds, bbls., c.l., same basis lb. .43 • —
bbls., t.c.l., same basis lb. .44 • .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 • —
bbls., t.c.l., same basis lb. .43 .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 • —
dms., t.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
p-Nitrochlorobenzene dms. lb. .26 • .27
2-Nitro-p-cresol, tech., dms., dlvd lb. .88 • —
Nitroethane, dms., c.l., dlvd. E lb. .25 • —
dms., t.c.l., dlvd E lb. .26½ —
tanks, dlvd E lb. .22½ —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions, tanks, f.o.b. works. ton. 164.00 • —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 • —
Cyls., t.l., min. 5 tons, same basis lb. .07½ —
Cyls., t.c.l., t.t.l., same basis lb. .15 • —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 • 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works unit-ton. 3.35 • —
Nitromethane dms. t.l., dlvd. E lb. .25 • —
dms., l.t.l., dlvd. E lb. .26½ —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene, bbls., frt. alld. lb. .31 • —
o-Nitrophenol, dms., works, frt. equald. lb. .94 • —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 • —
dms., t.c.l., frt. alld lb. 47 • —
1-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .23½ —
dms., t.c.l., same basis lb. .25 • —
tanks, same basis lb. .21 • —
2-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .18½ —
dms., t.c.l., same basis lb. .20 • —
tanks, same basis lb. .16 • —
Nitropropane prices West of Rockies are 1c. per lb higher.
m-Nitrotoluene tech., dms., frt. alld. lb. .50 • —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 • —
dms., t.c.l., frt alld. lb. 16 • —
tanks, frt. alld. lb. .13 • —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½ —
dms., t.c.l. works lb. .28 • —
flake, dms., c.l., t.l., works lb. .27½ —
dms., t.c.l. works lb. .28 • —
m-Nitro-p-toluidine, dms. lb. 1.25 • —
Nonylphenol, dms., c.l, frt. alld. lb. .22½ —
dms., t.c.l., frt. alld lb. .23½ —
tanks, frt. alld. lb. .20 • —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.34 • —
West Indian, bgs. lb. 1.26 • 1.28
Nutmeg oil, USP, dist., East Indian, cns lb. 9.00 12.00
West Indian, cns. lb. 9.00 12.00
Nux vomica, bls. lb. .20 • —
Powd., bbls., bxs. lb. .20 • .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .45 • .48
Octane, indust., tanks, Bayonne, N.J. gal. .20 • —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½ —
dms., t.c.l., dlvd. Zone 1 lb. .45½ —
tanks, dlvd., Zone 1 lb. .41 • —
Octyl alcohol, perfumers grade, bots. lb. 1.60 • 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½ —
dms., t.c.l., same basis lb. .55 • —
Octylphenol, bgs., c.l., works lb. .22½ —
bgs., l.c.l., works lb. .23 • —
tanks, works lb. .21½ —
Octylphenol in dms., 11c. higher.

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .15¾ .16¾
tanks lb. .13¾ .14
Oleic acid, dbl.-dist. (white), dms. lb. 17 • .19½
tanks lb. .14½ —
S. D., dms. lb. .16 • .18½
tanks lb. .13½ —
Oleo oil, extra, dms. lb. .14½ .14¾
Oleostearine, dms. lb. .13 • .13¼
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs. lb. .15 .20
Tears, cs. lb 22 .30
Olibanum oil, bots. lb 5.00 7.65
Extra fine, bots lb 8.00 9.50
Olive oil, edible, dms., spot, duty paid gal. 2.25 2.30
Olivine, crude, works ton. 12.00 —
20 mesh, works ton. 15.00 —
100 mesh works ton. 20.00 —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 —
gran., cns., 50 lbs., same basis. oz. 21.65 —
powd., cns., 50 lbs., same basis. oz. 21.65 —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 90
Calif., sweet., cns., dms lb. .60 —
Florida, cns., dms lb. .40 .45
Messina, cns. lb. 3.25 5.00
West Indian, bitter, cns., dms., lb. 2.50 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet lb .28 .30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

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Origanum oil, Spanish, cns. lb 1.80 2.30
Orris root, Florentine, bls. lb 55 - —
powd., bbls. bxs lb 65 - —
Verona, bls lb 35 - —
powd. bbls. bxs lb 45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)
Ouabain, USP bots gram 3.90 4.00
Ouricury wax, crude, bgs. lb .54 .55
Refd., pure, bgs. lb .60 .62
Oxalic acid, bgs., c.l., works lb .18 —
bgs., 10,000-lb. lots, works lb .19 —
bgs., smaller lots, works lb .20½- —
Oxalic acid in drums is priced ½c. per lb. higher.
b-Oxynaphthoic acid, pigment manufacture, dms., frt alld lb .912 - —
Dyestuff manufacture, dms., same basis lb 1.03 1.14
Oxyquinolin sulfate, cns. 100-lb lots, works lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

P

Palm oil, clarif., dms. lb. .1400- .1500
tanks lb. .11¼- —
Palm oil acid, double dist., dms. lb. .15¼- .17¾
single dist., dms lb .14¾- .17¼
tanks lb .12¼- —
Palmarosa oil, cns. lb. 4.90 - 6.00
Papain, powd. bots. lb 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP. cns., 25-oz to 100-oz. lots oz 5.00 -
cns., smaller lots oz 5.05 5.20
Papaverine sulfate, nat. or syn. USP, cns oz 7.10 7.35
Paprika, Bulgarian, bgs. lb .27 —
Hungarian, bgs lb 29 —
Spanish, bgs. lb .30 - —
Yugoslavian, bgs. lb. 29 .30
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline)
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb 1.21 —
Chlorinated, kgs lb 1.36 —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb .0765- —
130°-132°F., ASTM, tanks, refy lb .0765- —
Paraffin, fully refd., 132°-134°F., ASTM, tanks, refy lb. .0765- —
135°-137°F., ASTM, tanks, refy lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde 91% flake, bgs., c.l., frt alld lb .10 —
bgs., l.c.l., frt alld lb 12 .13
91% powd. bgs., c.l. ex whse. lb .1715- —
bgs., l.c.l. ex whse lb .1865- —
USP X, fib dms., c.l lb .19 - —
fib dms., 1,000-lb lots lb 20 - —
fib dms., smaller lots lb .21½- —
Paraldehyde, tech., 98%, 55-gal. dms. t.l., dlvd lb .14 - —
55-gal. dms. l.c.l., dlvd lb .15 - —
tanks, dlvd lb .11½- —
Paranitroaniline (see p-Nitroaniline)
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion ethyl, dms, frt alld lb .84 —
Parathion prices 2c. per lb higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Passion flower herb, bls lb. 35 40
Patchouli oil, imp., cns. lb. 5.60 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies lb 1.00 —
Peacock blue price 1c higher W of Rockies.
Peanut meal, old process, 45% bgs., f.o.b. mills ton.57.00 - —
solvent, same basis ton.54.00 Nom.
Peanut oil, crude, tanks, f.o.b. mills lb. .14 - —
Refd., dms. lb. .19¼- .19½
tanks lb. .17¼- —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 2.06
Dom., tech., powd., 150 jelly grade, bbls lb 1.28 - —
Imp. Danish, bbls ex whse lb 1.28 - —
Pelargonic acid, dms., c.l., dlvd lb. .25 - —
ton lots, same basis lb. 27½- —
tanks, same basis lb. 23½- —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .019 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .021 - —
Pennyroyal oil, USP, imported, cns. lb. 1.95 2.70
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., l.c.l., same basis lb 22½- .29
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 —
bgs., l.c.l., dlvd. lb .32 —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 - —
Pepper, black, Malabar, bgs. lb. .56 - —
Lampong, bgs. lb. .54 - —
Red, Funtuas, bgs. lb. .32 - —
Japanese, Hontoka, bgs. lb .37½- —
Santaka, bgs. lb .31½- —
Sudanese, bgs. lb. .36 - —
White, Muntok, bgs. lb. .77 - —
Peppermint leaves, dom., USP, bls., dms lb. .70 .75
imp., USP, bls. lb .85 —
Peppermint oil, nat., dms. lb. 5.00 - 5.50
Redist., USP, dms lb. 5.50 - —
Perchloroethylene, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd. lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd lb. .12¼- —
Peri acid, dry, bbls., frt. alld lb. 1.60 —
Paste, bbls., frt. alld lb. 1.55 —
Peru balsam, dms. lb. 1.10 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.40 —
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. lb. .10125-.11375
tanks, refy. lb. .05875- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. 09125-.10375
tanks, refy. lb. 04875- —
Petrolatum, lily white, dms., c.l., refy lb. .08625- —
dms., l.c.l., dlvd. lb. .10625- .12
tanks, refy. lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd lb. .11125- .125
tanks, refy. lb. .06875- —
Petrolatum, USP, soft yellow, dms., c.l., refy lb. .07125- —
dms., l.c.l., dlvd. lb. .095 - .10375
tanks, refy. lb. 04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS

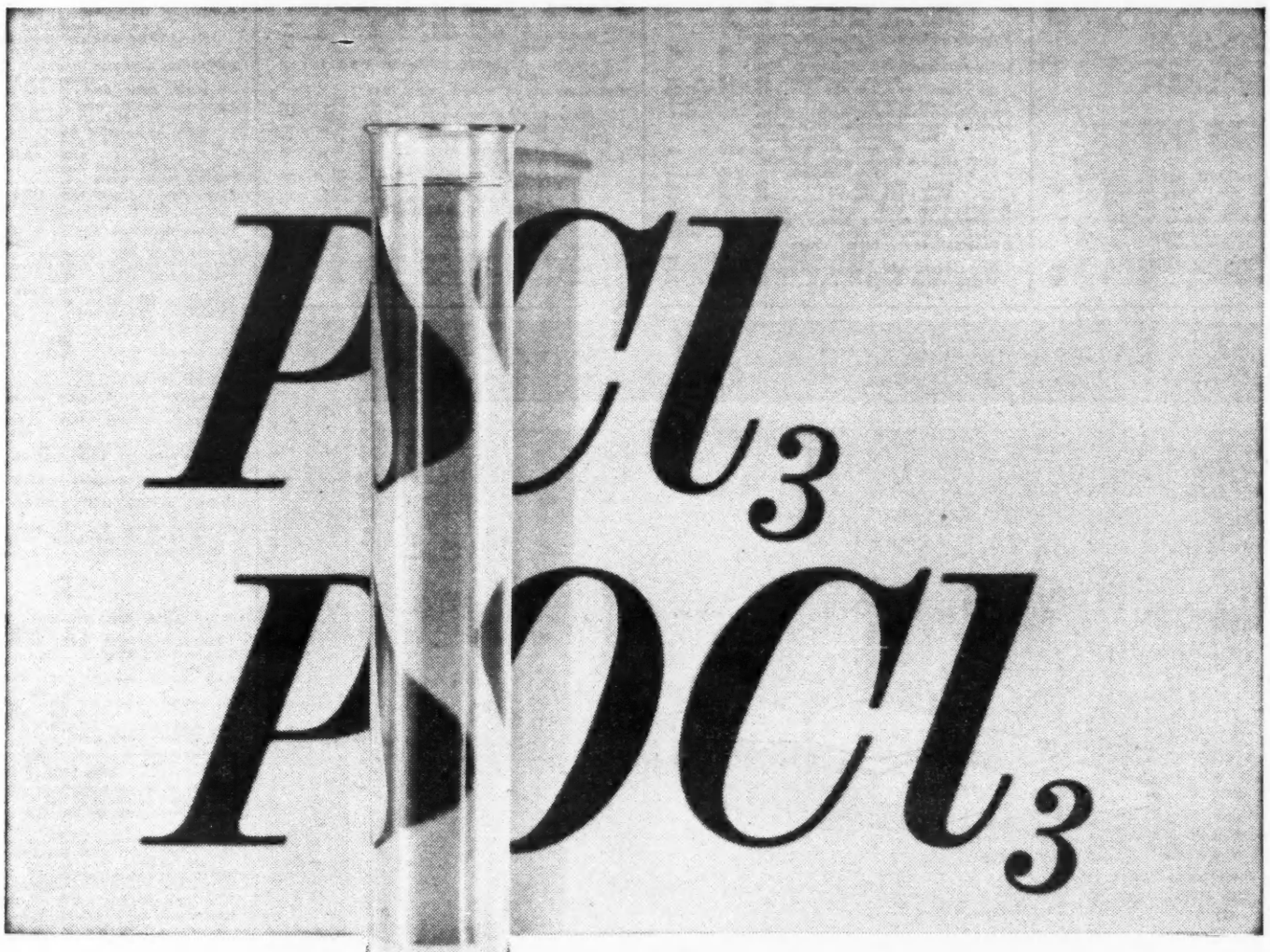
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works. lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. 13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb 91 - —
dms., l.c.l., same basis lb 93 - —
p-Phenetidine, dms., c.l., frt. alld. lb 1.05 - —
dms. same basis lb 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E of Rockies lb. .16¾- —
non-ret. dms., l.c.l., same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis lb. .16½- —
non-ret dms., l.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
30°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
Phenol, 30°C., or above, tar dist., non-ret. dms., l.c.l., same bas.s. lb .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb .18½- —
dms., same basis lo. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb 1.35 - —
Phenothiazine drench, fib dms., t.l., dlvd lb. 44 - —
fib. dms., l.t.l., same basis lb 47 - —
NF, fib. dms., t.l., same basis lb 43 - —
fib. dms., l.t.l. same basis lb. 46 - —
Phenyl acetate, dms., 100-lb. lots, works lb .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50%, bots lb. 2.15 - 2.35
100%, bots. lb. 3.80 - 4.00
Phenylacetic acid, pure, cryst., cns lb 1.25 1.75
dl-Phenylalanine, dms., works lb. 27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb lots, dlvd. E lb 3.45 - —
fib dms., smaller lots, dlvd E lb 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .41 - —
dms., l.c.l., dlvd. E. lb. .42½- —
tanks, dlvd E lb. .38½- —
m-Phenylenediamine, dms., c.l., t.l., frt. alld lb. 1.08 - —
l.c.l., l.t.l., same basis lb. 1.10 - —
o-Phenylenediamine, comi, fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .77 - —
Phenylethyl acetate, bots. lb. 1.25 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 1.50
Standard, dms. lb. 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 —
dms, smaller lots, frt alld lb 1.70 1.85
Phenylethylphenyl acetate, bots lb. 4.00 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97%, 450-lb. dms. lb 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E. lb. 1.80 - —
fib dms., smaller lots, dlvd E lb 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 .24
Phloroglucinol, coml., fib dms., works lb. 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib dms. works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 46.50 - —
Phosphate rock, Florida, land pebble run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 4.989 - 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 - 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 - 6.438
74-75%, b.p.l., bulk, c.l., same basis short-ton. 7.329 - 7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton. 8.219 - 8.228
Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64.
Phosphoric acid, food grade, 75%, chys. c.l., works, E., frt. equald 100 lbs. 7.00 —
chys. l.c.l. same basis 100 lbs. 7.25 7.75
tanks, t.w., works 100 lbs. 5.60 —
80% chys., c.l. frt equald 100 lbs. 7.85 —
chys. l.c.l., works 100 lbs. 8.10 9.35
tanks, t.w., works 100 lbs. 6.00 —
NF 85%, chys., c.l., works. 100 lbs. 8.50 —
chys., l.c.l., works 100 lbs. 8.75 9.00
tanks, t.w., works 100 lbs. 6.65 —
Phosphorus, amorph., red, dms., t.l., works lb. .55 —
dms., smaller lots, works lb. .56 .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt equald, lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms. l.c.l. works lb. .14½- .15½
Solid, dms., c.l. works lb. .11½- —
dms., l.c.l., works lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., l.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 —
dms., l.c.l., works lb. .39 .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs. c.l., works, frt. equald lb. .19 .23
bgs., l.c.l., same basis lb. .20 .24
tanks, same basis lb. .18½- .22½
Phthalimide 97-98%, dms., frt. alld lb. .65 —
Phthalocyanine blue, full strength, bbls. dlvd E of Rockies, lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb 1.52 —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 - —
Water dispersable, bbls. lb. 1.71 —
Phthalocyanine green prices 1c. higher W of Rockies
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline, dms. c.l., works, frt. equald lb. .46 - .48
dms., l.c.l., works, frt. equald lb. .46½- .49
tanks, same basis lb. .43 - .46
b-Picoline, 98% dms., t.l., works. lb. 1.05 - —
dms., l.c.l. same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C. dms., c.l., works. lb. .32½- —
dms., l.c.l., works lb. .33 - —
g-Picoline, dms., f.o.b., works lb. 1.60 - —
tanks, t.l. same basis lb. 1.50 - —
Picric acid, NF, bbls. lb. .85 - —
Tech., bbls lb. .44 - —
Pigment green B, kgs. lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Pilocarpine nitrate, USP, bots., vials. oz. 5.15 - —
Pimento, Jamaican, bgs. lb. .68½- —
Mexican, bgs lb. .56 —
Pimento berry oil, NF, dms. lb 3.75 - 9.25
Pimento leaf oil, crude, cns. lb. 2.40 - 2.60
Pine oil, dest.-dist. dms., l.c.l. works lbs., frt. lb. .15 - —
dms., l.c.l. ex whse, New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd lb. 188 — —
Pineneedle oil, Siberian (see Abies Siberoca oil).
Pink root, bls. lb. 2.25 - —
Piperazine, anhyd., dms., c.l., frt. alld lb 1.80 - —
dms., l.c.l., same basis lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs or more, frt. alld lb. .1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld lb. .89 - —
Piperazine phosphate, 42%, dms., 1,000 lbs or more, frt. alld lb. 1.06 - —
Piperidine, dist., 98% min., dms., c.l. t.l., frt. equald lb 2.55 - —
Piperonyl butoxide, dms., dlvd E lb. 4.50 5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works oz. 81.00 -85.00
Pleurisy root, bls. lb. .45 .50
Podophyllum resin, NF, dms. lb. 12.50 - —
Poke root, bls. lb. .19 - .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .25 - —
Nubs, bgs. lb. .37 - .40
Poppy seed, Argentine, bgs. lb No stocks.
Dutch, bgs. lb. .16 - —
Danish, bgs. lb. .15 - —
Polish, bgs. lb. .16 - —
Turkish, bgs. lb. .12 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs 4.25 - —
dms., l.c.l., same basis 100 lbs. 5.25 - —
tanks, same basis 100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.55 - —
reg., flake, 88-92%, dms., l.c.l., same basis 100 lbs. 11.05 - —
solid, 88-92% dms., c.l., works 100 lbs. 9.10 - —
dms., l.c.l., works 100 lbs. 10.60 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
powd., dms. lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¾
Potassium bichromate in dms ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb bgs., c.l., frt equald lb. .37 - —
100-lb bgs., 5,000 lbs. 1 shipt., same basis lb. .38 - —
100-lb bgs. smaller lots, same basis lb. .40 - —
Potassium borohydride, powd., dms., works lb. 16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots
Potassium bromate, 200-lb. dms., c.l., frt. alld lb. .49 - —
Potassium bromide, USP gran., bbls., kgs lb. .39 .40
Potassium carbonate, dom., NF, gran. bbls., dms lb. .20 —
Dom. tech. powd., bbls., dms lb. .21 .22
Dom., calcinated, bgs., c.l. works, 100 lbs. 8.50 —
bgs., l.c.l. same basis 100 lbs. 9.55 —
Dom. hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., l.c.l., works lb. .13½- .14⅛
Powd., dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 .15
works lb. .12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs or more, works lb. .16¾- —
NF, gran., 25-lb metal dms lb. .36 —
NF powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works ton. 29.00 - —
bgs., c.l., works ton. 30.00 - —
99.3% KCL, bulk, c.l., works. ton. 28.00 - —
bgs., c.l., works ton. 33.00 - —
USP, cryst, dms. lb 20 .22
USP, gran., dms. lb .21 .23
USP, powd., dms. lb .24 .26
Potassium chloride agricultural (see Potassium muriate)
Potassium chromate, tech., dms., works lb. .50 .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd. 250-lb dms. same basis, lb. .46 - —
Potassium cyanide, dms. 20,000-lb. lots or more works lb. .42½- —
dms. 2,000-19,999-lb lots works, lb. .43 —
dms. smaller lots, works lb. .44 .44⅛
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 —
dms., smaller lots works lb. .65 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms. smaller lots lb. .29 - —
Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib dms. l.c.l. works lb. .31 - —
Potassium fluoride, dms., works lb. .36 - .37
Potassium gluconate, 100-lb dm., f.o.b works E lb. 1.67 —
Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30
Potassium hydroxide, tech (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots lb .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb lots lb. 1.38 - —
Potassium iodide, USP, cryst. gran., dms., 500-lb., f.o.b. works, ½. 1.55 - —
Potassium manure salt, min. 20% K2O, bulk, c.l., works, unit-ton. .17 - .1768
Potassium metabisulfite, gran. dms., lb. .16 - —
Powd., dms lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .35 - .37
bagged 60% minimum K_2O, same basis ton. 26.00 -27.20
Gran., bulk, c.l., works unit-ton. .36 - .38
bagged, 60% minimum K_2O, same basis ton. 26.60 -27.80
Inside prices apply to material contracted for prior to July 1, 1960.
Outside prices apply to material contracted for after that date but also for delivery during the current month
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs. 17.00 - —
bbls., smaller lots 100 lbs. 18.00 -19.00
gran., bgs., 20-ton lots 100 lbs 9.50 —
bgs., smaller lots 100 lbs. 11.00 -12.00
powd., bgs., 20-ton lots 100 lbs. 10.50 —
bgs., smaller lots 100 lbs. 12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm. f.o.b works E lb. .32 - —
Potassium pentaborate, gran. dms., c.l. works ton. 219.50 - —
dms., ton lots, ex whse ton. 311.00 - —
dms., smaller lots, ex whse ton. 316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms. l.c.l., works lb. .19 .20
Potassium permanganate, coml., kgs., works lb. .25 .33
USP, dms., works lb. .29 .35
Potassium persulfate, dms., c.l., works lb. .17½- —
dms. l.c.l., works lb. .18 .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .1475- .1575
Potassium prussiate red (see Potassium ferrocyanide)
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 7.65
tanks, works 100 lbs. 6.15 - —
Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs 6.70 - —
tanks, works 100 lbs. 5.60 - —



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FMC's experience in handling these hazardous materials is hard to match. You can rely on FMC for safe shipment ... for advice in storing and handling PCl_3 and $POCl_3$.

FMC's research staff will gladly work with you in developing new compounds using these chemicals. If you have an application in mind, take advantage of this service.

FMC is **basic in phosphorus and chlorine:**–Since we start with our own highly-purified elemental materials, you get the benefit of minimum impurities in FMC's phosphorus chlorides.

FMC's **strategic location** and primary source of raw materials means we can meet all your requirements–on schedule!

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PCl_3 and $POCl_3$ are excellent chlorinating and condensing agents. They are important intermediates for gasoline additives, plasticizers, dyestuffs. . . .

Phosphorus trichloride is used to make surfactants and reacts with alcohols and phenols to form phosphites.

Phosphorus oxychloride is widely used in the synthesis of organic phosphates, including gasoline additives, plasticizers, and non-burning functional fluids.

Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION
Chemicals and Plastics Division
161 East 42nd Street, New York 17, N. Y.

Potassium Silicate—Sage

Potassium silicate, glass grade, bgs., c.l., works ..100 lbs.17.30 -18.00
bgs., l.c.l., works ..100 lbs.17.80 - —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works ..100 lbs. 4.60 - —
Potassium sil.cofluoride, bgs., works. lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb higher.
Potassium stannate, dms., frt. alld. E lb. .789 - .861
Potassium sulfate, min 50% K_2O, agricultural, bulk, c.l., works .unit-ton. .67½- .69½
Inside price applies to tonnage contracted for prior to July 1, 1960.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate, NF VII, cryst., dms., lb. .31 - .33
NF VII, gran., 400-lb. dm ... lb. .18 - —
NF VII, powd., 400-lb. dm ... lb. .17 - —
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works ..... lb. .77 - .79

Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works ..... lb. .16½- —
ctns., 1-ton lots or less, works .lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price, ton.13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., works E lb. .42¼- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works .lb. .39 - .40
Potassium-zirconium flouride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works ..... lb. .52½- .55
Pregnenolone, bots. ..... gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld lb. 2.25 - —
USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb 2.40 - —
dms., 500 lbs ..... lb 2.45 - —
dms., 100 lbs ..... lb 2.50 - —
Progesterone, USP, bots .... gram No prices.
Pregnenolone acetate, bots .. gram No prices.
Propenyl guaethol, dms. ..... lb.24.30 -27.00
b-Propriolactone, tech., dms., c.l., f.o.b. works .lb. .47½- —
dms., l.c.l., l.t.l., same basis .lb. .48½- —
tanks, same basis ..... lb. .45 - —

Propionic acid, syn., pure, dms., c.l., dlvd. ½, 1, 1½, 2, 3, bgs., ton lots..lb. .23¼- —
dms., l.c.l., dlvd. ..... lb. .24¾- —
tanks, dlvd. ..... lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd ..... lb. .16½- —
tanks, dlvd. ..... lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd. .lb. .14 - .15
dms., l.c.l., dlvd ..... lb. .15½- .16½
tanks, dlvd. ..... lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works .lb. 3.90 - 4.40
n-Propyl-p-hydroxbenzoate, USP, dms .lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots ..... kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd. lb. 1.24 - —
dms., l.c.l., same basis ..... lb. 1.255 - —
n-Propylene dichloride, consumers', dms., c.l., dlvd. E. .lb. .0843- —
dms., l.c.l., same basis..... lb. .0995- —
tanks, same basis ..... lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., dlvd. E. lb. .15 - —
dms., l.c.l., same basis ..... lb. .16¾- —
tanks, same basis ..... lb. .12½- —
USP, dms., c.l., dlvd. E ..... lb. .17 - —
dms., l.c.l., same basis .... lb. .18¾- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis ..... lb. .21 - —
tanks, same basis ..... lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E. lb. .17 - —
dms., l.c.l., dlvd. E ..... lb. .18½- —
tanks, dlvd. E ..... lb. .14½- —
Psyllium seed, black, bgs ..... lb. .30 - .35
Blonde, bgs. ..... lb. .18 - .20
Husks, bgs. ..... lb. .42 - .45

Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots..lb. .03¾- .04¾
bgs., smaller lots ..... lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs, ton lots..lb. .06¼- —
fine, bgs., ton lots..... lb. .04 - —
sun dried, coarse, bgs..ton.60.00 - —
fine, bgs. ..... ton.60.00 -70.00
Pumpkin seed, bgs. ..... lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works .lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works..lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 - 9.80
Pyrethrum liquid, 100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.11.00 -11.35
purif, 20%, dms., works .. lb.11.00 -11.35
Pyridine, denat., dms., c.l., works and frt. equald..gal. 2.77 - —
dms., l.c.l., same basis..... gal. 2.80 - —
Reid., 2°, non-ret. dms., c.l., same basis ..... lb. .69½- —
dms., l.c.l., same basis..... lb. .70 - —
tanks, same basis ..... lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b works kilo.95.00 -100.00
Pyrites, Canadian, 48-50% S, mines, long-ton 5.00 - 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works lb 3.50 - —
Pyrogallol, NF, 100-lb. dms..... lb 3.50 - —
Pyroxylin, USP, bots ..... lb 9.50 - —

Q

Quassia chips ..... lb. .10 - —
Quicksilver (see Mercury metal).
Quince seed, bgs ..... lb. 1.75 - —
Quinidine sulfate, USP, 1,000-oz. dm oz. .74½- —
Quinine, NF, 1,000-oz. dm ... oz. .3105- —
Quinine bisulfate, USP, 1,000-oz. dm. oz. .2330- —
Quinine hydrochloride, 1,000-oz. dm. oz. .3030- —
Quinine sulfate, USP, 1,000-oz. dm. oz. .2575- —
Quinoline, dms., c.l., frt. equald..lb. .50¾- —
dms., l.c.l., same basis ..... lb. .51¼- —
tanks, same basis ..... lb. .50 - —

R

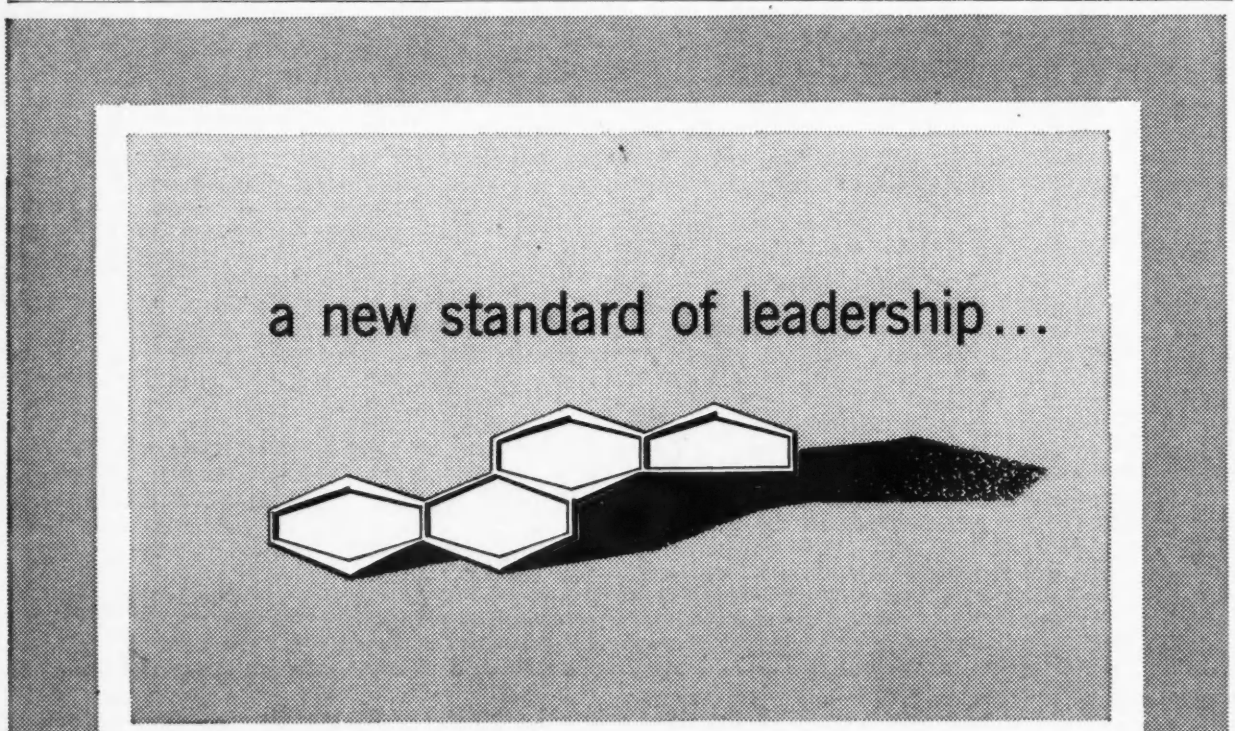
R salt paste, dms., frt. alld., 100% basis lb. .98 - —
Powd., frt. alld, 100% basis lb. 1.08 - —
Rapeseed oil, dms..... lb. .15¼- .15⅛
tanks ..... lb. .13¼- —
Rare earth oxalate, NF, 45-50%, bgs, works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Red toner, Lake C, alizanine, bbls., works lb. 1.25 - —
Reserpine, cryst., bots ... gram. 1.25 - —
Resorcinol, tech. grade, bgs., c.l., works, frt. equald. lb. .77½- —
bgs., l.c.l., same basis..... lb. .78½- —
Resorcinol in dms., 1c. per lb. more.
USP, powd., dms., works ... lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs ..... lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans ..... lb.42.00 -51.00
Synthetic ..... lb.14.00 -16.00
Rhubarb root, India, whole, bgs lb. .25 - —
powd., bgs. ..... lb. .35 - —
tanks, same basis ..... lb. .14½- —
Riboflavin, USP, fib, dms., kilo or more, dlvd kilo.36.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo.104.50 - —
Rice bran oil, clarified, dms., l.c.l. lb. .14 - .14⅛
tanks, dlvd. E ..... lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots lb.1,152.00- —
Turkish, bots ..... lb.560.00 -750.00
Rosemary oil, Spanish, NF, cns., dms lb. .97 - 1.40
Spanish, tech., cns., dms lb. .50 - 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works..unit-lb. .10½- —
Resin, 25-45%, fib, dms., works. unit-lb. .10½- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis ..... lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York.gal. .19 - —
Group 3 ..... gal. .13875- —
Houston, Texas ..... gal. .155 - —
Rue oil, bots ..... lb. 2.75 - 3.00
Rutin, NF, fib, dms., 10 kilo lots kilo.13.00 - —
fib, dms., 5 kilo lots .... kilo.13.50 - —
fib, dms., 1 kilo ..... kilo.14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis ... lb. .24 - —

S

S acid, bbls., works ..... lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib, dms., 1,000-lb lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots ..... lb. 1.55 - —
Saccharin, USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York .lb. .1725- .1750
tanks, Atl. Coast ..... lb .15¼- 15⅛
Saffron, Mancha Superior, tins .lb.19.50 - —
Safrol, dms. ..... lb .65 - —
Sage, Dalmatian, bgs. ..... lb. .40 - —
Greek, cns. ..... lb. .15 - —
Italian, cns. ..... lb. .18 - —



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Today Syntex continues to serve as an important supplier of hormones and intermediates to the pharmaceutical industry. By continued research and constant improvement of production techniques, Syntex has helped to raise the standards of quality and dependability in this significant field of medicine.

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steroid hormones and intermediates

SYNTEX

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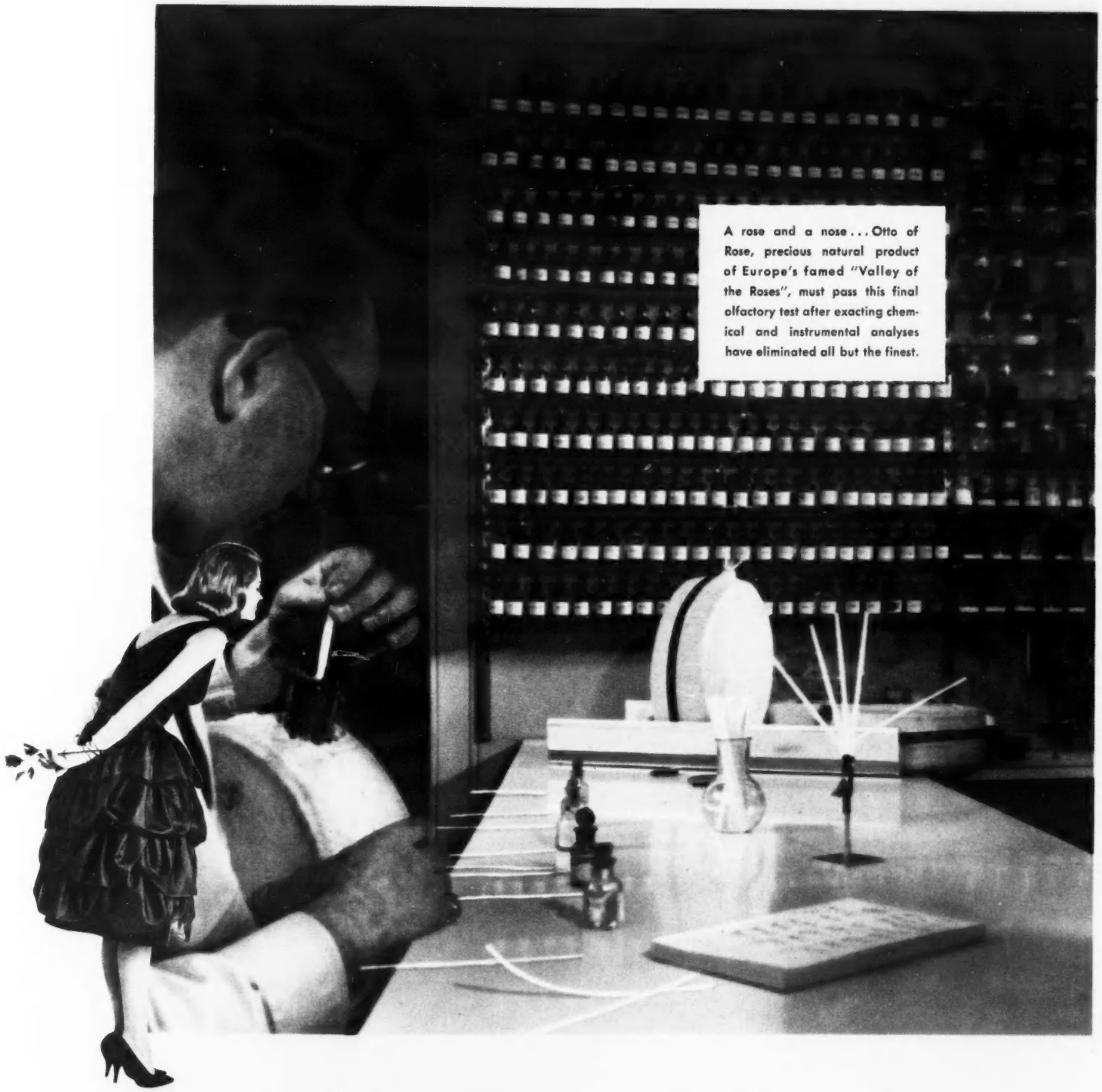
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ARGENTINA AUSTRIA BELGIUM BRAZIL CANADA ENGLAND FRANCE GERMANY HOLLAND INDONESIA ITALY NORWAY SOUTH AFRICA SWEDEN SWITZERLAND

Sodium sesquicarbonate, bgs., l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
dlvd. zone 2 ..... 100 lbs. 4.35 - 4.60
dlvd. zone 3 ..... 100 lbs. 4.75 - 4.90
dlvd zone 4 ..... 100 lbs. 5.35 - 5.60

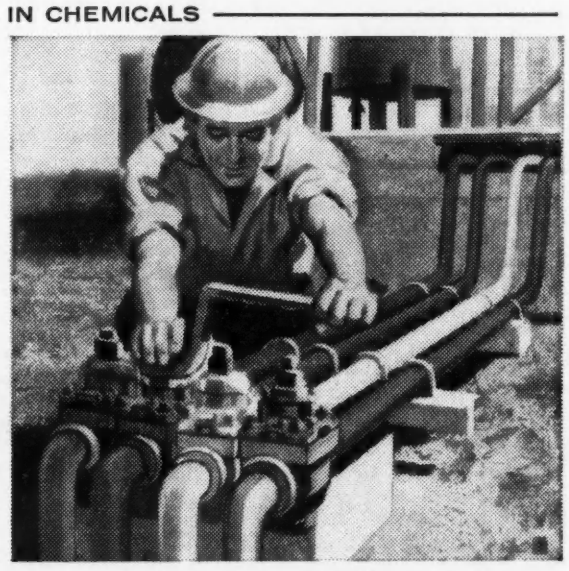
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La., and Miss. No of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l. works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs 6.20 - —
Sodium sesquisilicate hydrated, bgs., c.l., works 100 lbs 5.00 - —
bgs., 6,000-19,900 lb lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms. 6,000-19,900 lb lots works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid dms., c.l., works, 100 lbs. 1.65 - —
dms., t.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47° Be. 1:2.9 turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., t.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. 1:2.4 turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., t.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., t.c.l., works lb. .725- —
Sodium silicofluoride in dms., 0.4c. per lb. higher
Sodium stannate, dms., works, frt. alld., E lb. .652 - .712
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton.54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton.36.00 - —
bulk, c.l., works ton.32.00 - —
USP, cryst., fib dms lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼- —
dms., t.c.l., same basis lb. .08¼- —
Liq. 40-44%, tanks, works, 100% basis ton.130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., t.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., t.c.l., same basis lb. .06½- —
Sodium sulfite anhyd., powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., t.c.l., same basis 100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works, 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works frt. equald lb. .04½- —
dms., t.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate NF, cryst., bbls. lb. .13½- —
Tech., anhyd., 100-lb bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb bgs., t.c.l., t.t.l., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate, tech., anhyd., photo grade, 64-lb bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb bgs., t.c.l., t.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate tech., pentahydrate, photo grade, 100-lb. bgs., t.c.l., t.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, etns., c.l., works. lb. .14¼- —
etns., 5-ton lots, works lb. .14½- —
etns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb. cns., c.l., frt. alld E. lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
bgs., t.c.l., same basis 100 lbs. 8.65 - —
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.95 - —
bgs., t.c.l., works 100 lbs. 9.70 -13.13
dms., c.l., works 100 lbs. 9.45 - —
dms., t.c.l., works 100 lbs.10.20 -10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., dlvd. lb. .22½- —
dms., t.t.l., same basis lb. .23 - —
Sodium-zirconyl sulfate, fib dms., 1,000-lb lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360°F b.r., 14° 16°C. m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°-265°F b.r., 31°C. m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York gal. .275 - —
Solvent naphtha, 319°-380°F. b.r., 27°C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322°-395°F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate fib dms., 20,000-lb. lots, works lb. .33¼- —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½

Sorbitan tristearate, fib. dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., t.c.l., works lb. .19 - —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb. .25 - .26
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., comyl., aqueous, dms., c.l., works lb. .26 - —
dms., t.c.l., works lb. .27 - —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., t.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., t.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton.44.50 - —
Soybean oil, crude, tanks, Decatur, lb. .10¼- —
Foots, soapstock, acid 95%, tanks, lb. .05¼- —
Refd., alkali, dms. lb. .1455- .1480
tanks lb. .1255- —
Clarified, dms. lb. .1405- .1430
tanks lb. .1205- —
Salad, dms. lb. .1435- .1460
tanks lb. .1235- —
Soybean oil acids, dbl. dist., dms., lb. .16 - .18½
tanks lb. .13½- —
S. D., dms. lb. .14¾- .17¼
tanks lb .12¼- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom., bls. lb. .75 - —
Spearmint oil, NF, dms. lb. 6.50 - 7.00
Sperm oil, bleached, winter, 45°, dms lb. .1675- .1775
tanks lb. .1475- —
Nat., winter, 45°, dms lb. .1575- .1675
tanks lb. .1375- —
Spermaceti wax, blocks, cs. lb. .32 - .33
Cakes, cs. lb. .33 - .34
Spruce oil, cns., dms. lb. 2.10 - 3.55
Squill, white, bls. lb. .16 - .18
Powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .822 - .844
Stannic oxide, dms., dlvd. lb. 1.11 - 1.12
Stannous chloride, anhyd. dms., works lb. 1.02 - 1.270
hydrous, cryst., dms., works lb. .88 - .89
Stannous sulfate, dms., works lb. 1.073 - 1.093
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. lb. .60 - .61
Stearic acid, dbl., pressed, bgs. lb. .15¼- .17¼
Single-pressed, bgs. lb. .14¼- .17¼
Triple-pressed, bgs. lb. .17 - .19½
Stearine, oleo (see Oleostearine.)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs. lb. .16½- .18
Streptomycin sulfate, bulk gram. .03 - .032
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb lots lb 3.57 - —
Strontium nitrate, bgs., c.l., works 100 lbs.11.00 - —
bgs., t.c.l., works 100 lbs.12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton.56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, bots. oz.25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax gum, USP, cs. lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 - —
dms., t.c.l., same basis lb. .19 - —
tanks, same basis lb. .14½- —
Styrene monomer, tech., 99.2%, dms., c.l. lb. .1504- —
dms., t.c.l., same basis lb. .1704- —
tanks lb. .1254- —

Above prices are escalated for each calendar quarter on the basis of cost of benzene and petroleum refining labor.

WHAT'S NEWS IN CHEMICALS



BUTON* RESINS

New line of thermosetting polymers for better surface coatings!

Now Enjay offers you new lower cost, high-quality resins of low density. Highly compatible with a broad range of modifiers and solvents, Buton Resins — formerly called C-Oil and Butoxy Resins — can be blended with ureas, melamines, short and medium oil alkyds, vinyls, phenolics and nitrocellulose to obtain specific properties. They can be cured by conventional methods and by a new technique called flame curing which produces the tough, chemical-resistant finish 20 to 50 times faster. Buton resins are suggested for use in primer formulations for appliances, automobiles and all types of metals and can also be formulated for use in container linings, finishes for furniture, wire coatings, etc. For technical assistance or to order Enjay chemicals contact the nearest Enjay office. *Home Office:* 15 West 51st Street, New York 19, New York. *Other Offices:* Akron • Boston • Charlotte • Chicago • Detroit • Houston • Los Angeles • New Orleans • Tulsa

*Trademark

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY

ENJAY PETROCHEMICALS

Styrolyl acetate, bots. lb. 1.03 - 1.10
Succinic acid, purif., cryst., dms., t.l., frt. alld lb. .62 - —
dms., l.t.l., same basis lb. .63 - .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
Sucrose, refd., white, bgs., refy E. lb. .0970- —
Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 - —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 - —
Sugar (see Sucrose)
Sugar cane wax dom., refd., slabs, 80-lb ctns., works lb. .60 - .65
80-lb ctns., spot lb. .65 75
Sulfabenzamide, dms. kilo 8.80 9 90
Sulfabenzamide-sodium, dms kilo 9 00 10.10
Sulfacetamide USP, fib dms kilo 6.61 6.83
Sulfacetamide-sodium USP, fib dms kilo 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo 23.35 24 45
USP, powd., dms. kilo 22 60 23 70
Sulfadiazine sodium USP, dms kilo 24 80 25.90
Sulfaguanidine NF X, dms kilo 5.50 6 60
Sulfamerazine sodium, USP, powd., dms kilo 24.80 25.90
Sulfamethazine USP XV microcrys tals, dms kilo 19.65 20.75
USP XV powd., dms kilo 18 75 19 85
Sulfamic acid, cryst, dms, c.l., t.l., works 100 lbs 16.00 —
dms, l.c.l., t.l.s., works 100 lbs 17 50 18.50
Gran., dms., c.l., t.l. works 100 lbs 14 75 —
dms, l.c.l., t.l.s., works 100 lbs 16 25 17.25
Sulfanilamide NF reg, 1,000 lb., frt equald lb 1.50 - —
NF fib dm, frt equald lb 1.55 - —
Sulfanilamide quinoxaline, veterinary dms kilo 16.28 - —
Sulfanilic acid, tech, dms, c.l., frt. alld lb. .21 - —
dms., l.c.l., frt alld lb. .23 - —
Sulfapyridine USP XV, powd., bots., tins kilo 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 6.90
NF X, powd, dms. kilo. 5.50 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb lots or more lb. 2.35 —
Sulfur, comi., flour, bgs., mines, 100 lbs. 2.35 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs 2.25 - —
bbls., mines 100 lbs 2.80 - —
Sulfur, crude, dom., bright, bulk, f.o.b cars, mines long-ton 23.50 - —
export, f.o.b vessels, Gulf ports, long-ton 25.00 - —
US and Canada, f.o.b vessels Gulf ports long-ton 25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton 24.00 —
Mexican dark sulfur price is $1 per long-ton lower
Sulfur, refd., flowers, NF, bgs., mines 100 lbs 5.65 - —
bbls., mines 100 lbs 7.00 - —
flour, light, bgs., mines 100 lbs 5.25 - —
bbls., mines 100 lbs 6.25 - —
lump, bgs., mines 100 lbs 4.95 - —
rolls, bgs., mines 100 lbs 5.50 - —
bbls., mines 100 lbs 6.25 - —
sail block, bgs., mines 100 lbs 4.65 - —
virgin block, bbls., mines 100 lbs 4.70 - —
Sulfur runhermakers, comi., reg., bgs., mines 100 lbs 2.45 - —
bbls., mines 100 lbs 3.70 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs 2.55 - —
bbls., mines 100 lbs 3.80 - —
refd., bgs mines 100 lbs 4.90 - —
bbls., mines 100 lbs 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs 2.75 - —
bbls., mines 100 lbs 4.00 - —
Sulfur dichloride, ret, dms., c.l., works, frt. equald lb. .05¼- —
ret. dms., l.c.l., same basis lb. .06¼- —
tanks, same basis lb. .04½- —
Sulfur dioxide, liq., comi., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Sulfur dioxide, refrigeration, cyls., dlvd lb. .23 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05¼- —
dms., l.c.l., same basis lb. .06¼- —
tanks, same basis lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs 2.00 - —
cbys., l.c.l., works 100 lbs. 2.30 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton 22.35 - —
98% tanks, works ton 23.50 - —
99% tanks, works ton 23.70 - —
100% tanks, works ton 23.95 - —
CP, NF, consumers' chys., c.l., frt. equald lb. .12¾- —
Sulfuric acid, CP, NF, consumers', chys., l.c.l., same basis, lb. .14¼- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt bots., extra, cs., l.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton 25.00 - —
40%, tanks, works ton 29.00 - —
65%, tanks works ton 39.50 - —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.00 - —
bulk, f.o.b. vessel at Fla unit-ton. 1.05 - —
Sweet birch oil, USP, northern, cns lb. 4.00 - 9.50
USP, southern, cns lb. 2.00 3.05

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2,4,5-T, dms., c.l., works, frt. equald, lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton 28.00 - —
bgs., l.c.l., works ton 31.00 -36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York ton 31.00 - —
bgs., l.c.l., works ton 34.00 - —
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l works ton 38.00 - —
625 mesh, micronized, bgs., c.l., works ton 80 00 - —
ord., Calif., grd., bgs., c.l., works ton 34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton 19.40 - —
bgs., l.c.l., works ton 37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton 20.00 -35.00
Tall oil, crude, dms., c.l., works lb. .04¼- .04½
tanks, works lb. .02¾- .03
Dist., depending on grade, dms., c.l., works lb. .07 - .09¼
tanks, works lb. .05 - .07¼
Tall oil, refd., depending upon grade, dms., c.l., works lb. .07¾- .08¼
tanks, works lb. .05¾- .06¼
Tall oil acids, dms., c.l., works lb. .07 .10
dms., l.c.l lb. .07½ .10½
tanks, works lb. .05 .08
Tallow, edible, tanks, dlvd lb. .09 - .09¼
Inedible, fancy, bleachable, tanks, lb. .05¾- .06
fancy, guaranteed, bulk, f.o.b. steamer lb. .06¾- .06½
dms., f.a.s. lb. .07¾- .07½
tanks, dlvd. lb. .06¼- .06¾
No. 1, tanks, dlvd lb. .04¾- .05
Prime, tanks, dlvd lb. .05¾- .05¾
Special, tanks, dlvd lb. .05¼- .05¾
Sulfonated, 25%, bbls., l.c.l lb. .08½ .08¾
50% bbls., l.c.l. lb. .10½ .11
Tallow acids, dist., dms. lb. .11¾- .14¼
tanks lb. .09¼- —
Hydrogenated, dms. lb. .14 - .16½
Tallow oil, acidless, dms, c.l. lb. .13½- —
dms., l.c.l lb. .14½- .15½
Tangerine oil Florida, dms lb 4.75 —
Tankage, animal, feeding, 9-11% ammonia, New York bulk unit-ton. 4.75 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb lots lb 2.05 —
bbls., smaller lots lb 2.06 2.07
NF, powd., bbls., 1,000-lb lots lb 1.95 - —
bbls., smaller lots lb 1.96 1.99
Tech., dms. lb 1.05 —
Tansy oil, dms lb 6.60 8.00
Tar acid oil, 15-18%, dms., c.l., frt equald gal. .53½- —
dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
Tar acid oil, 25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms, c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, NF, 100-lb bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb fib dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms lb. .40 - .50
Terpinyl acetate, extra, cns., dms, lb. .64 - .75
Prime, dms lb 53 56
Terpinyl propionate, dms lb. 1.65 - 1.70
Testosterone, USP, bots gram No prices.
Testosterone propionate, USP, bots, gram. No prices.
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech. (see Perchloroethylene)
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms, l.c.l, dlvd. E lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd. E lb. .55 - —
tanks, dlvd E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or t.l.s., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31¼- —
dms., l.c.l., Memphis, Tenn lb. .32½- —
dms., c.l., t.l., Newark, N.J lb. .33¼- —
dms., l.c.l., Newark, N.J lb. .34½- —
tanks, dlvd E of Denver lb. .31 - —
tanks, dlvd W of Denver lb. .32 - —
Tetrahydrophthalic anhydride dms., c.l., t.l., frt alld E lb. .39 - —
l.c.l., t.l.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate)
Thallium metal, dlvd lb 7.50 -10.00
Thallium sulfate, 99% bots, dlvd. lb 5.00 -10.00
Theobromine, NF, fib dms, 100 lbs., f.o.b., works lb. 4.10 - 4.15
Theobromine and sodium acetate, USP, fib dms., 500-lbs. works lb 6.45 - —
Theobromine, sodio-salicylate, NF, fib dms., 500-lbs., works, lb 3.80 - —
Theophyline, USP, anhyd., 100-lb dms., frt alld lb 3.65 - —
Thiamine hydrochloride, USP, fib dms., frt alld kilo. 36.00 - —
USP, ampule grade, fib., dms., frt alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib dms., frt alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots lb. .76 - —
Thionaphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb 5.20 - —
Tungstated, PTMA, kgs. works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb 3.50 - —
di-Threopine, dms., 100 kilos, works, kilo. 121.00 - —
Thyme leaves, French, triple sifted extra, bgs lb. .27 - —
Spanish, extra, bgs lb. .12 - —
triple sifted, bgs. lb. .25 - —
Spanish, bgs. lb 09 - —
Thyme oil, NF red, cns., dms lb 1.80 - 3.00
NF, white, cns lb 2.10 - 3.20
Tech., white, cns. lb. .40 1.85
Thymol, fib, dms., 25-lbs., f.o.b. works lb. 2.45 - —
Thymol iodide, NF, dms., 100-lbs f.o.b. works lb. 7.30 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.04 - —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd. lb. .26½ —
reg., bgs., c.l., dlvd. lb. .25½ —
bgs., l.c.l., dlvd. lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b Jacksonville Fla. ton. 180.00 —
bgs., 5-ton lots, Niagara Falls, N Y ton. 205.00 - —
bgs., ton lots, same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd E lb. .27½- —
bgs., l.c.l. dlvd E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O₂, reg., bgs., c.l., dlvd lb. .09¾- —
bgs., l.c.l., works lb. .09¾- —
50% Ti O₂, high-tinting, dms., c.l., lb. .14¾- —
dms, l.c.l. lb. .14¾- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 —
dms., l.c.l., works lb. .27½- .29
tanks, works lb .20 —
Tobias acid, dms., c.l., t.l. lb. .81 - —
dms., l.c.l. lb. .84 - —
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo. 67 00 —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 - —
dl-a-Tocopherol, bots. kilo. 99.00 - —
dl-a-Tocopheryl acetate, bots kilo. 90.00 - —
25% dry. powd., bots kilo. 22.50 -24.00
33% dry. powd., bots. kilo. 30.00 31.50
o-Tolidine base dry, kgs., 100% basis lb 1.55 - —
Paste, kgs., 100% basis lb 1.50 - —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine, hydrochloride paste, kgs., 100% basis lb. 1.50 - —
Tolu balsam, cns. lb. 3.50 - 3.65
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. .25 - —
Toluene, petroleum, indust., tanks, dlvd. E. of Rockies gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.c.l., same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb. .16 - —
1,000-lb. or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb. .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., l.c.l., same basis lb. .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms., frt. alld. lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura, cs. lb. 1.50 - —
Brazilian, Surinam, cs. lb. 1.30 - —
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works, lb. .22 - —
dms., l.c.l., t.l.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 - 4.20
No. 2, cs. lb. 3.75 - 3.80
No. 3, cs. lb. 3.40 - 3.65
USP, powd., bbls. lb. 1.05 - 1.15
Triacetin dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver, lb. .42¼- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld. E. of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works, lb. .52½- —
dms, l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin, dms., l.c.l., dlvd. lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b. works lb. .52 - —
USP, 100-lb. dms., frt. equald lb. 1.25 - —
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., l.c.l. frt. alld. E lb. .16 - —
tanks, frt. alld. E lb. .13¼- —
Trichlorobenzene prices in the West 1¼c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms, l.c.l., dlvd. lb. .16¼- —
tanks, dlvd lb. .12¼- —
1,1,2 Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd. E lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., dlvd lb. .14 - —
dms., l.c.l., dlvd. lb. .15¼- —
tanks dlvd lb. .12¾- —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 - —
dms, l.c.l. same basis lb. 75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chys., works, tric adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd. lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd lb. .34½- —
dms., l.c.l., dlvd lb. .35¼- —
tanks, dlvd lb. .33½ —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. 26½ - —
dms., l.c.l., dlvd. E lb. 28 - —
tanks, dlvd E lb. 24 - —
Triethanolamine dms, c.l., dlvd E. lb. 24½ - —
dms., l.c.l., same basis lb. 26 - —
tanks, same basis lb. 22 —
Triethanolamine lauryl sulfate, dms., c.l., t.l. frt alld lb. 25½ - —
dms, t.l.l. frt alld. lb. 26½ - —
tanks, frt alld lb. 24½ - —
Triethylamine dms, c.l., dlvd E. lb. .50 - —
dms, l.c.l., same basis lb. .51½ - —
tanks, same basis lb. .47½ - —
Triethyl nitrate retd. tecn., non-ret dms, c.l., frt alld E. of Denver lb. .46¼ —
non-ret dms., l.c.l., frt alld. E of Denver lb. .47¼ —
tanks frt alld E of Denver. lb. 43¾ —
Triethyl phosphate dms, c.l. dlvd. lb. 40½ —
dms., l.c.l., dlvd. lb. 42 —
tanks, dlvd lb. 38 —
Triethylene glycol, dms, c.l. dlvd E lb. 21 —
dms., l.c.l. dlvd. E lb. 22½- —
tanks, same basis lb. 18½- —
Triethylenetetramine, dms., c.l., dlvd E lb. .51½ - —
dms., l.c.l., dlvd E lb. .53 - —
tanks, dlvd E lb. .49 - —
Triisobutylene, tanks, dlvd. lb. .08 - —
Tri-isopropanolamine, dms., c.l., dlvd E lb. .23¼ - —
dms., l.c.l., dlvd E lb. .24¾ - —
tanks, dlvd E lb. .20¾ - —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 .305
tanks frt equald 100% basis. lb. .26 - —
25-40% soln. dms, c.l., frt equald, 100% basis lb. .35 - —
dms, l.c.l. frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 - —
dms., l.c.l., t.l.l., same basis lb. .36 - —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., dlvd, E lb. .34 - —
bgs., l.c.l., t.l.l., dlvd. E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. 41½- —
bbls., l.c.l., frt. equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene dms., c.l., dlvd. E gal. .44 - —
dms., l.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt alld. E lb. .20½- —
dms., l.c.l., t.l.l. frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c. per lb higher in west.
Trisodium phosphate (see Sodium phosphate tribasic)
di-Tryptophane, dms., 1 kilo, works. kilo. 154.00 - —
Tung oil, dms., New York lb. .24½- .25
tanks, imported lb. —
tanks, domestic, mills lb. .22½ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb 4.25 - —
Tungstic acid, tech., dms., 1,000-lb lots, works lb. 2.25 - —
dms., smaller lots, works lb. 2.45 - —
Turkey red, bbls., works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 .50
Tuscan red, bbls., frt. equald lb. .26 - .32
Tyrothricin, USP, 1 to 5 kilos gram. .50 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .30½- .35
Jobbing types, dry, bbls., same basis lb. .16 - .22¼
Regular types, dry bbls., same basis lb. .16 - .37¼
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, 55-gal. dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton. 98.00 - —
bgs., l.c.l., dlvd. E ex whse ton. 100.00 - —
45% N, agricultural, bgs. c.l., (30 tons) dlvd. E. ton. 100.00 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton. 120.00 - —
37 grade, tanks, same basis ton. 145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 - —
dms., t.l.l., same basis lb. .70 - —
Uva-ursi leaves, bls lb. .13 - —

V

Valerian root, Belgian bgs. lb. .32 - —
Indian, bgs. lb. .25 - —
di-Valine, dms., 1 kilo, works kilo. 37.00 - —
Vanadium pentoxide, tech., dms., works lb. 1.38 - —
Vandyke brown, bbls, works lb. 09½- .12
Vanilla beans, Bourbon, tins lb. 8.75 - —
Mexican cuts, tins lb. 9.00 - —
whole, tons lb. 9.50 - —
Vanillin ex lignin, 100-lb fib dms, 2,000-lb lots or more lb. 2.50 - —
less than 2,000 lbs lb. 2.70 - —
Venetian red, jobbing, bgs., works, lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 - —
35%, bgs., works lb. .0625- —
40%, bgs., works lb. .0675- —
Vetiver oil, Bourbon, cns. lb. 17.25 -17.50
Haitian, cns. lb. 14.00 -14.50
Victoria blue toner, molybdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 - 4.90
Tungstated, PTMA, 250-lb bbls., dlvd. E. of Rockies lb. 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.

Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .1810- —
55-gal. dms., l.c.l., dlvd lb. .1960- —
tanks, dlvd. lb. .1560- —
tanktrucks less than 4,000 gal., dlvd lb. .1610- —
Zone 2, 55-gal. dms., c.l., dlvd lb. .1910- —
55-gal. dms., l.c.l., dlvd lb. .2210- —
tanks, dlvd. lb. .1660- —
tanktrucks, less than 4,000 gals., dlvd lb. .1710- —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 . —
Vinyl chloride monomer, tanks, works, min. frt. alld. E. of Rockies lb. .113 . —
Vinyl ether, USP, anethesia, bots., 50cc., hospitals bot 1.12 . —
bots., 75cc., hospitals bot 1.56 . —
Vinyl ethyl ether tech dms., c.l., works lb. .30¼- —
dms., l.c.l., works lb. .31 . —
tanks, works lb. .28¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 . —
dms., l.c.l., same basis lb. .50 . —
tanks, same basis lb. .47 . —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 . —
1 to 9 dms., works lb 1.35 . —
tanks, works lb. 1.15 . —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt. prepaid lb. .14 . —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 . —
Vitiamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 . —
325,000 units per gram, same basis kilo.43.88 . —
250,000 units per gram, same basis kilo.33.75 . —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.45.00 . —
0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo dms gram.1.00 . —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms., gram. 1.00 . —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B^{12} activity gram.52.00 . —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.52.00 . —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo, dms., frt. alld gram. .90 . —
0.1% cobalamin concentrate in gelatin, 1-10 kilo. dms., frt. alld gram. .90 . —
Vitamin C (see Ascorbic acid).
Vitamin D, (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 . —
850,000 units per gram less than kilo lots kilo.45.00 . —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb. 2.00 - 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 . —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 . —
dms., 5-24-lb lots, New York or Chicago lb. 2.15 . —
Watchung-type reds., bbls lb. 1.95 . —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 . —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .21 . .22
White precipitate, USP, powd., dms., 100 lbs., f.o.b. works lb 5.50 . —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .30 . —
Wintergreen oil, USP nat. northern, cns lb. 6.35 -17.50
USP, nat. southern cns lb 3.75 - 7.00
Wintergreen oil, syn (see Methyl salicylate).
Witch hazel bark, bls lb. .16 - .17
Witch hazel leaves, bls. lb. .35 . .40
Wollastonite, fine, paint grade, bgs., c.l., works ton.41.00 . —
bgs., l.c.l., ex whse ton.51.00 . —
Medium, paint grade, bgs., c.l., works ton.29.00 . —
bgs., l.c.l., ex whse. ton.39.00 . —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs lb 2.50 . —
Wormseed oil (see Chenopodium oil NF).
Wordwood oil, cns. lb. 4.50 - 4.75

X

Xylene coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 . —
Birmingham dist. gal. .29 . —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 . —
Geneva, Utah gal. .29 . —
Johnstown, Pa. gal. .29 . —
Lackawanna, N.Y. gal. .29½- —
Lone Star, Tex. gal. .27 . —
Lorain, Ohio gal. .29 . —
Middletown, Ohio gal. .30 . —
Xylene, coaltar, indust., tanks, works:
Minnequa, Col. gal. .29 . —
Philadelphia dist. gal. .29 . —
Pittsburgh dist. gal. .29 . —
Sparrows Point, Md. gal. .29 . —
Terre Haute, Ind. gal. .29 . —
Youngstown, Ohio gal. .29 . —

Xylene, petroleum, indust., tanks f.o.b. works:
Bayonne, N. J gal. .29 . —
Baytown, Tex. gal. .27 . —
Charleston, S. C. gal. .29 . —
Chicago, Ill gal. .28½- —
Detroit, Mich., dlvd gal. .27½- .29
Houston, Tex. gal. .27 . —
Philadelphia, Pa. gal. .29 . —
Providence, R. I. gal. .30 . —
Sewell's Point, Va. gal. .28 . —
Wood River, Ill gal. .28½- —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif lb. .25 . —
dms., l.c.l., f.o.b., Richmond, Calif lb. .26 . —
tanks, frt. alld. lb .23 . —
o-Xylene, dms., c.l., works lb. .08 . —
dms., l.c.l., works lb. .09 . —
tanks, works lb. .06 . .06½
p-Xylene, dms., c.l., works lb. .20 . —
dms., l.c.l., works lb. .21 . —
tanks, frt. alld. lb. .1645- —
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald lb. .23 . —
56°-58°C., m.p., dms., l.c.l., works, frt. equald lb. .33 . —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis. lb. .40 . —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.25 . —
dms., l.c.l., same basis gal. 1.30 . —
tanks, same basis gal. 1.05 . —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis. gal. 1.35 . —
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis gal. 1.40 . —
2,4-Xylidine, tech., dms., frt. alld. lb. 1.15 . —
2,5-Xyliline, tech., dms., frt. alld. lb. 1.20 . —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 . —
dms., l.c.l., same basis lb. .40 . —
tanks, same basis lb. .33 . —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 - 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces, dlvd lb. .27 . —
Yeast, brewers, primary, USP XV, 150 meg. B^1 per gram, 100-lb. dms lb. .47 . —
USP XV, 270 mcg., B_1 per gram, 100-lb dms lb. .52 . —
USP XV, 300 mcg., B_1 per gram, 100-lb. dms lb. .56 . —
USP XV, 900 mcg., B_1 per gram, 100-lb. dms. lb. .60 . —
Torula, USP, dlvd. lb. .18 . —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls lb. .40 .45
Ylang-ylang oil, Bourbon, bots lb. 7.00 -22.00
Ylang Ylang oil, Bourbon, extra bots lb.24.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.73 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs. 500-lb lots or more, dlvd lb .343 —
bgs. smaller lots, dlvd lb .373 —
Zinc acetate, NF, VIII, dms lb .53 —
Tech. dms., l.c.l., works lb. .29¾ —
Zinc borate, bgs., 1,000 lbs or more, works lb. .25 . —
bgs., less than 1,000 lbs., same basis lb. .27 . —
Zinc chloride, NF, gran., dms lb. .42 . —
NF, precip., powd., dms lb. .26 . —
Tech., soln., 50%, dms., c.l., works 100 lbs 5.30 . —
dms., l.c.l., works 100 lbs 6.40 . —
tanks, works 100 lbs 5.15 . —
fused, dms., c.l., works 100 lbs.10.70 . —
dms., l.c.l., works 100lbs.11.20 . —
gran., fib. dms., c.l., works. 100 lbs.11.45 . —
fib dms., l.c.l., works 100 lbs.11.95 . —
Zinc chromate bbls., dlvd. lb. .29 . —
Basic bbls., dlvd. lb. .34 . —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .55 . —
dms., smaller lots, works lb. .57 . —
Zinc dust coml. bbls., c.l., works. lb. .17 . —
Pigment, bbls., c.l., works lb. .16½- —
bbls., l.c.l., works lb. .18¼- —

IN WHITE
PIGMENTATION

TITANOX*-C-50

FILLS THE GAP
IN HIDING POWER...

...between rutile titanium dioxide pigment on the one hand and 30% titanium (rutile)-calcium pigment on the other. And, in certain paint compositions, it is a valuable tool for the formulator.

A true composite pigment of approximately 50% rutile titanium dioxide and 50% calcium sulphate (anhydrite), TITANOX-C-50 occupies an intermediate position in hiding power between rutile "pure" titanium dioxide such as TITANOX-RA and 30% titanium (rutile)-calcium such as TITANOX-RCHT. Unlike unextended titanium dioxide pigments, TITANOX-C-50 does not decline rapidly in hiding power as its pigment volume concentration is increased. And, in comparison with TITANOX-RCHT because of lesser bulk or volume, TITANOX-C-50 is an attractively priced replacement for the 30% composite pigment where pigment volume must be lowered while hiding is maintained or increased.

The high titanium dioxide content of TITANOX-C-50 and its unique union with extender produce greater tinting strength and higher hiding power than in any other white composite pigment ever produced. Usually, TITANOX-C-50 presents greater hiding efficiency per pound of titanium dioxide content than mixtures of "pure" titanium dioxide and extender. In some formulations as low as 4 pounds of TITANOX-C-50 has done the work of 3 pounds of rutile "pure" titanium dioxide. Easy to mix and grind, TITANOX-C-50 is excellently suited to:

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- **Flat Wall Paints—such as alkyds—where formulation dictates the need for a lower prime pigment volume than might be attainable with composite pigments having lower tinting strengths.**
- **Enamel Undercoaters**
- **Tinted Enamels**
- **General Utility Paints**

TITANOX-C-50 may be particularly suited to your requirements. For more complete details contact our Technical Service Department. Titanium Pigment Corporation, 111 Broadway, New York 6, N. Y.; offices and warehouses in principal cities. In Canada: Canadian Titanium Pigments, Ltd., Montreal.

7218

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Zinc Fluoride—Zirconium Oxychloride

Zinc fluoride, bbls., works	lb.	.49 - .50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½- —
dms., l.c.l., frt. alld.	lb.	.23½- —
Zinc metal prime western, slabs, E. St. Louis	lb	.13 - —
Prime western slabs, New York	lb.	.13½- —
Zinc naphthenate liq 8% Zn., dms., frt. alld	lb.	.27 - —
10% Zn., dms., frt alld	lb.	.33 - —
Zinc nitrate, tech., cryst., bbls., works	lb.	.20 - —
Zinc oxide, pigment, American process, lead-free bgs. c.l., frt alld	lb	.14½ —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15 - —
bgs., l.c.l., smaller lots, same basis	lb.	.15½- —
Zinc oxide, leaded, 35% bgs., c.l., mills, frt. alld	lb.	.15⅜- —
bgs., l.c.l., 10 tons or more, same basis	lb	15⅞- —
50%, bgs., c.l., same basis	lb.	.15¾- —
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis.	lb.	.16¼- —
French process, green seal, bgs., c.l., mills, frt alld	lb.	.16¼- —
bgs., l.c.l., 10 tons or more, same basis	lb.	16¾- —
Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis	lb.	.17¼- —
red seal, bgs., c.l., same basis.	lb.	.15¾- —
Zinc oxide, French process, green seal, bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼- —
bgs., l.c.l., smaller lots, same basis	lb.	16¾- —
Zinc oxide, white seal, bgs., c.l., same basis	lb.	.16¾- —
bgs., l.c.l., 10 tons or more, same basis	lb	.17¼- —
bgs., l.c.l., smaller lots, same basis	lb	.17¾- —
Zinc oxide, USP dms., c.l., frt. alld.	lb.	.18¼- —
dms., l.c.l., 10 tons or more, same basis	lb	.18¾- —
dms., l.c.l., smaller lots, same basis	lb.	.19¼- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45 - .46
NF powd., dms.	lb.	.48 - .49
Zinc resinate, precip 7.2-7.6% Zn., dms., frt. alld.	lb.	.45 - —
Zinc silicofluoride dms. works	lb	12½ .14
Zinc stearate, USP, ctns., c.l.	lb.	.41 - —
ctns. l.c.l.	lb.	.41 - —
	lb.	.42 - .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l. dlvd.E.	100 lbs	8.75 - —
bgs., l.c.l., dlvd. E	100 lbs.	9.75 - —
Zinc sulfate in bbls 40c higher.		
Zinc sulfide pure bgs. c.l. dlvd	lb.	.2530- —
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works	lb.	2.04 - —
Zinc, yellow (see Zinc chromate)		
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25 - —
bbls., c.l., works	100 lbs.	10.85 - —
bbls., l.c.l., works	100 lbs.	11.35 - —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld	lb.	.26 - —
Normal, 250-lb. dms., frt. alld.	lb.	.33 - —
Zircon (G) gran., bgs., c.l., works.	lb.	.03½- —
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅝- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04 - —
bgs., smaller lots, works	lb.	.06½- —
Zircon (G), milled, bgs., c.l., works.	lb.	.04½- —
bgs., 5 tons to c.l., works	lb.	.04⅝- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝- —
bgs., 500-1,999-lb. lots, works	lb.	.07½- —
Zircon (G) in barrels 1c. higher.		
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23 - —
Zirconium hydride powd. electronic grade, dms., works	lb.	14.00 -15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50 - —
Electric-fused lump, bgs., 500 to 1,999-lb lots, works	lb.	.48½- —
bgs., smaller lots, works	lb.	.51 - —
milled, bgs., c.l., works	lb.	.62 - —
bgs., 5-ton lots, works	lb.	.62½- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½- —
bgs., 500 to 1,999-lb. lots, works	lb.	.64 - —
bgs., smaller lots, works	lb.	.66 - —
Zirconium Oxide,		
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55 - .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27 - .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62 - .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½- —

HEADS REGIONAL SALES: John Peterson, named director of sales for the midwest region by the industrial products division of E. F. Drew & Co., New York.

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	Conventional	AZODOX*				
AZO-22	20	35	Acicular	Long	21	5
AZO-11	23	40	Acicular	Medium	18	4
AZO-33	27	46	Acicular	Short	16	3
AZO-55	32	60	Nodular	Small	14	2
AZO-55-LO	36	65	Nodular	Medium	12	1
AZO-66 (French)	28	—	Nodular	Fine	12	–
AZO-77 (French)	24	—	Nodular	Fine	12	–

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Activated Alumina Useful In Bleaching Cottonseed Oil

An improved method of bleaching cottonseed oil, using activated alumina (Aluminum oxide) has been devised by the Department of Agriculture.

The material is used as a bleaching agent in conjunction with higher bleaching temperatures than those used at present. USDA has demonstrated in laboratory tests that activated alumnia is four to eighteen times more efficient than the natural bleaching earths now used. Tests also showed that activated alumnia bleaches oil successfully when it is used in conjunction with higher processing temperatures. Further, it was found that the higher temperatures had no adverse effect on the oil properties.

Symposiarchs Set to Hear Talk by Wernher von Braun

Dr. Wernher von Braun, internationally acclaimed authority on space, will be guest speaker at the Symposiarchs dinner in the Chemists' Club, New York, on November 22.

Dr. von Braun, who is director of the George C. Marshall Space Flight Center of the National Aeronautics & Space Administration, Huntsville, Ala., will speak on "Vehicles for Our New Frontiers—Saturn."

A reception will be held at 6 p.m., dinner three-quarters of an hour later and the address will follow at 8 p.m.

UOP Making Chemical Bid

—Continued from page 3

esses, plans to have the paranitroaniline unit on stream any day now at Shreveport, La. Also under construction are units to produce nonylphenols, other alkyl aromatics and alkylated amines.

In an adresss before the New York Security Analysts last week, UOP president Maynard Venema disclosed that the company is weighing a move into petrochemical production, either alone or in a joint venture.

The company's competitive position in this business, he indicated, would be strengthened by its extensive roster of petrochemical processes. He cited UOP's "Catalytic Condensation," "Alkar," "Hydeal," "Hydrar," "Dehydrogenation of Ethylbenzene" and "Udex," patents.

Currently, he noted, UOP's process development works is being directed toward these goals:

- Improving processing technics and equipment.
- Improving methods of purification in order to upgrade raw materials used in these processes.
- Developing better catalysts and more effective additives and reagents.
- Developing more accurate and reliable instrumentation.

Turning to a related field, Mr. Venema noted that the company had perfected a catalytic smog-control muffler. The company is confident, he said, that the muffler will meet requirements laid down by California's new smog-control laws.

He pointed out that UOP has formed Universal Oxidation Processes, Inc., in Los Angeles, to supervise production and sales of its "Purzaust" muffler.

Anticipating a normal upturn in process royalties at this time of the year, Mr. Venema predicted that UOP earnings for 1960 would exceed those of 1959. The company earned $3,234,202 last year on gross revenues of $65,359,306.

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

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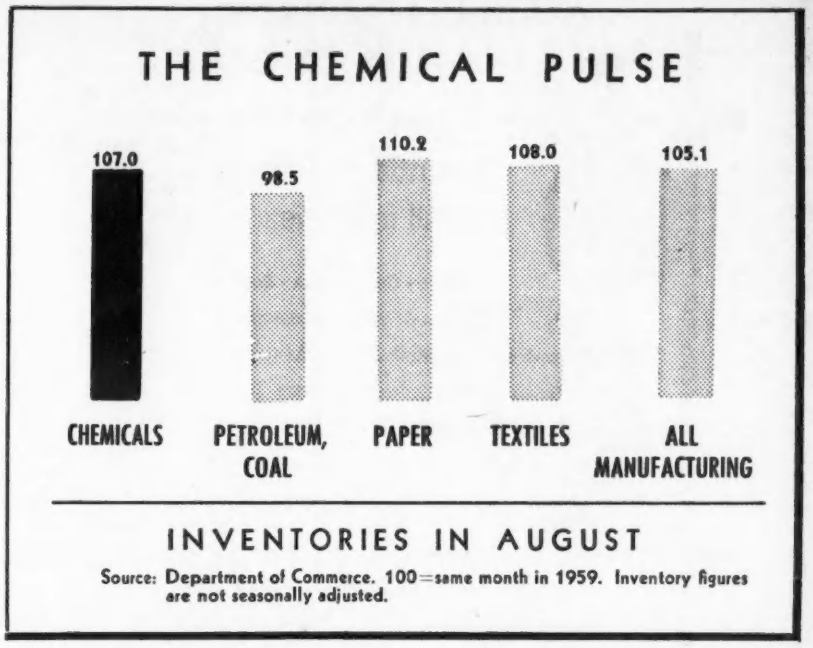

Drug Trade Perturbations

Whatever may be the first impression got from general reading in the page 3 headline last week that leaders of the drug industry had told the Food & Drug Administration that "the law is one thing, but drug making is another"—and that impression can be multivarious—simple perusal of the article will make it fully clear that the industry has not lost or discarded any of its well-known respect for the laws which have to do with its practices or products.

It is not what those laws require that perturbs the industry; it is the lack on the part of the enforcing agency of an understanding of and concern for how the industry would be unnecessarily burdened under certain proposals on what drug manufacturers should do in connection with the agency's enforcement program and procedure.

It is clear to its leaders that the objectives of the drug industry and those of the drug laws should be and must be properly coordinated to serve the public welfare efficiently. It is in recognition of that necessity that the industry is offering to set up an educational program with the primary purpose of properly and adequately informing the enforcement agency with respect to what that coordination requires.

There is reason to believe that the agency will go along cooperatively in the endeavor to develop and assure satisfactory, efficient enforcement teamwork. It is to be regretted that such collaboration was not attained without recourse to the public declarations of dissatisfaction which undoubtedly will outweigh those of the industry's educational plan, at least in the motivation of lawmakers, law-enforcers, probers and others who are demanding that the requirements of the drug laws and their enforcement be made more stringent.

A perturbing move along that line is now under way in the promotion of the enactment by various legislatures of laws similar to the statutes in five important states which require licensing of drug manufacturers and wholesalers, with the objective of "strengthening sanitary and quality controls of their practices and products."

Insofar as its statutory perturbations are concerned, the drug industry is imperatively called upon to be an active participant in the discussion of problems in legislation at the food and drug meeting noted on page 7 last week. Its representation should be at least on a parity with that of the Food Law Institute.

Some observers have been reported to believe—or to fear—that they see a specter of a possible internal perturbation for the drug industry in the revival by about a dozen labor unions in New York of the proposal that they set up and operate special-price drug stores to serve their members. A similar proposal flopped about six months ago. The retail drug trade has made it quite clear that its members will not handle the products of manufacturers who supply them to the unions. But, there is little reason to expect the union plan to get going. It will not be easy for the promoters to get efficient registered pharmacists to manage their stores, in the face of certainty that they never would be able to get a job in the regular trade.

Onward—But Whichward

The national economy — no matter which of its numerous variety of popular definitions be applied—must go onward, for what is a matter of time. But, whether it will go forward or backward, upward or downward, is a matter which must be determined by the force that is effectively and continually applied to make it what it is and to push it whither it goes. That force must come by way of the purposes, policies and procedures in the endeavors of private industry. The efficiency of those factors can be helped—and they can be hindered—by the same factors of political practice, their effect depending primarily upon how they are sought by business, how they are accepted by it and how and why they are applied.

Now that they have got from the results of the national election a potentially informative manifestation of the predominant political judgment of the consuming public of this country, what will the economic "experts" be guessing on the trend during—and after—the current two-month inter-regnum in Washington?

Will they now feel able to decide whether—and when—the "soaring sixties" will begin to soar? Do they see signs that the current quarter is not and will not be as gloomy as was the third? Will they see enough sunshine—other than that which is a normal characteristic of the holiday season—to believe that they were justified in predicting that the national economic trend will be forward and upward? Will whatever they see and say be influenced to any significant degree by what they thought and expected politically a fortnight ago? Was such thinking and expecting an influencing factor with respect to the view of the business advisers of the Secretary of Commerce expressed October 21, that the further easing of industrial output was imminent and that no upturn in economic activity could be expected before the middle of next year?

Those advisers are not "experts"; they are realists and actualists—and they will not stick out their necks in any inspirational endeavor. The same is true with respect to the purchasing agents' group whose views were published in last week's issue, starting on page 4.

The two groups provide private enterprise with a reliable guide toward doing its own seeing realistically and actually, not by way of sideline "experts." In that self-service it must now figure out what are the interrelations of the decline in sales and inventories at all levels of business reported for September by the Department of Commerce, the trend of consumer installment-buying debt, the urging that such buying be curtailed, at the same time that the Federal Reserve System was endeavoring to apply a relaxed credit policy "to stem the business lag"—the increased consumer buying, tax-paying—and saving—and the peak-climbing by the cost of living over the past ten weeks, and make appropriate use of the significance of that somewhat paradoxical grouping in the planning, developing and conducting of a camgaign fitted to the increase in sales and earnings found to be widely expected in the business world in a recent poll by the National Industrial Conference Board.

Expecting is a good start toward the getting of such things. But, it must be complemented by adequate pushing properly applied forward and upward. And that is a job which private enterprise must do for itself, whatever it has to face.

Washington Talks It Over

Kennedy Victory: What It Means to the Chemical Industry

—Continued from page 3

filled previously by Democrats and a score or more house seats.

Most observers in Washington are convinced that these developments will serve as a brake on legislation too far left of center, which, if offered early in the session, may bring about a speedy end to the Kennedy honeymoon with congress.

A big hand in the making of policy in the new administration may thus fall to Vice-President-elect Lyndon B. Johnson, who will be presiding over the senate, and Speaker Sam Rayburn of the house, charged with the duty of guiding the administration's program in congress.

While the election leaves behind a number of question marks, it's already clear that among Mr. Kennedy's first targets will be the federal regulatory agencies. Can they do a tighter and more efficient administration job? And here he has in mind Food & Drug Administration, Federal Trade Commission and Interstate Commerce Commission, among others.

Last week at his first official post-election press conference, the President-elect announced that he was naming James M. Landis to head up a study group which will look into the agencies' work "with a view to maximizing the effective dispatch of their business."

Mr. Landis, former dean of Harvard Law School and a key figure in the Roosevelt and Truman administrations (member of the Securities & Exchange Commission and chairman of the Civil Aeronautics Board), has agreed to submit a preliminary report by December 15.

Although the electorate voted some changes in the membership of both houses, the chemical industry will be dealing, for the most part, with the same people as chairmen of the congressional committees as in the past—Rep. Oren Harris of the house commerce committee, Sen. Estes Kefauver of the senate anti-monopoly committee, Sen. Harry Byrd of the finance committee and Rep. Wilbur Mills of the house ways and means committee, to name a few.

The only significant committee chairmanship change comes from the retirement of Sen. James Murray of Montana, which will elevate Sen. Clinton Anderson of New Mexico to the top of the senate interior committee.

This senate group handles mining legislation, but policies of the committee will remain unchanged. Sens. Anderson and Murray see alike on most mining questions.

Sen. Kennedy's victory at the polls undoubtedly will accelerate legislation in the welfare field, which includes tighter controls over the drug industry, medical care for the aged, aid to hospital construction, aid to medical schools and higher minimum wages.

He is said to have given his blessings to the Kefauver probe of drug prices and this will be resumed with new vigor by the Tennessee senator next session.

Mr. Kennedy is reported to agree with Sen Kefauver that drug prices are "too high," though he is not willing to go as far as some—not Sen. Kefauver—who feel that drug prices should be controlled by the government.

This became apparent during the closing days of the campaign. In response to questions from the New York *Times*, Mr. Kennedy made his position known on two important questions raised in the drug industry by the Kefauver investigation. One had to do with price control, and the other, efficacy.

He said that "as long as the antitrust laws are vigorously enforced I see no need for federal price control of drug prices at this time."

On the matter of the government assuring the efficacy of drugs, he said, "I believe there is a public interest in separating those drugs which are useful from those that are ineffective. But only if it is shown that the existing laws do not provide adequate protection should we intrude additional responsibility."

While both statements are somewhat ambiguous, chemical and drug executives look for Mr. Kennedy to expound further on these and other matters vital to their industries in his opening message to congress soon after being inaugurated into office January 20.

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Heavy Chemicals

A rundown on sensitive price areas indicates that the standard $3 to $4 discounts on sulfur remain available as previously at the majority of shipping points. This situation is not expected to change. It's felt that the market is not showing sufficient strength to return actual prices to list levels, while on the other hand, as long as the list quotations represent a part of market, they will be left unchanged. In the sulfuric acid market, prices continue discounted on the east coast and at list elsewhere.

Consumers of caustic soda are said to be enjoying a substantial freight break at two eastern shipping points. This, together with last fortnight's reduction of barge rates on the Montague, Mich., to Chicago run could be interpreted as something of a price concession to stimulate business. Those holding this view note that caustic has been running well behind its coproduct, chlorine, in this year's alkali market.

Election day and the suspense carrying over through the following morning served to reduce the volume of business in the nonferrous metals market as well as the rate of paper production. Prices were unaffected.

Fertilizer production, targeted for one of its biggest seasonal showings, preceded, lending an assist to some of the acid markets, notably phosphoric and nitric, where a business fillip is not scorned these days.

The American Paper and Pulp Association reported production for the week ended Nov. 5, at 88.4 percent of theoretical capacity, as compared with the revised figure of 95.3 percent for the previous week and 94.6 percent for the corresponding week of last year.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 13, 1959
106.84	106.84	106.85	103.56

For Current Prices see page 9

Acids

Chromic—From Detroit's auto makers, whose bet on the strength of the consumer's buying power stands forth as a notable feature of the nation's current economic posture, comes good demand for chromic acid; and chemical outlets are holding up well.

Hydrochloric—Output in September totaled 78,391 short tons, down inconsiderably from August's 79,552 tons, with stocks about unchanged at 14,518 on September 30 as against 14,924 a month earlier, the Census Bureau reports.

Hydrofluoric—Business, trade sources report, is stepping along at a good clip; prices steady, supply in balance.

Nitric—Springing up under the lash of Fall planting, souped up by the unflagged trend to a higher analyisis product, fertilizer output, as it lends a much needed assist to an otherwise limping acid market, proceeds.

Sulfur—The steel output lag was expected to continue. American Iron & Steel Institute estimated ingot production for last week at 1,464,000 net tons, or 51.4 percent of capacity, which would represent a slight decline from the previous week's actual total of 1,478,000 tons, or 51.9 percent of capacity.

Production a month ago, AI&SI recalls, was running significantly better—totaling 1,579,000 tons in the comparable week. With settlement of the strike a year ago, output was just getting off its haunches, totaling 1,291,000 tons.

In the sulfuric acid market proper, business is running along nicely, trade sources report. Brisk activity in chemical accounts, it is said, has more than offset the sagging steel picture. Prices of the acid are steady at the usual discounted rates on the east coast, and steady at list elsewhere.

Bases and Salts

Aluminum Sulfate—Owing to the low-inventory policy of consumers, business volume is tending to show broad week by week shifts. These shifts are less apparent in the paper industry, where output is mostly above the 90 percent level. Overall, with chemical accounts averaging a high level of consumption, the alum business is doing well, trade sources report.

Borax—Producers are talking in terms of a 5 to 10 percent gain over last year's sales level, with about two and one-half months still to be reported. The material is running especially well in such modern precincts as refrigeration and antifreeze compounds. Supplies are reported to be in good balance, prices steady.

Caustic Soda—Business is being booked at unchanged price levels, but in the midwest, bargaining rates have been reduced for one run, and on the east coast consumers are enjoying a break on freight costs. As noted often here, caustic soda is not doing nearly so well as chlorine, its coproduct, this year.

Caustic soda production totaled 388,915 tons in September, down sharply from 416,379 tons in August, the Census Bureau reports. Stocks closed the month at 325.184 tons, down from 342,342 a month earlier, indicating that sales had held up better than production.

Chlorine—Well-sustained consuming interest, good supply balance and hard prices comprise the report from this comfortable market.

Chlorine output in September totaled 371,058 tons, as against 390,549 tons the month before, the Census Bureau reports. Stocks closed the month at 35,531 tons, down from 38,023 tons the month before.

Soda Ash—Output totaled 364,756 tons in September, as compared with 388,184 the previous month, with stocks trimmed to 97,823 tons, by month's end, down from 105,294 a month earlier, the Census Bureau reports.

Nonferrous Metals

Copper—Mill and foundry consumption of refined copper climbed to 122,000 short tons in August, up 65 percent over July's five-year low, Business & Defense Services Administration reports.

Copper wire mills consumed 72,000 tons, up 80 percent over the preceding month; up 14 percent from August, 1959. Brass mill consumption rose 53 percent from July but fell 10 percent short of the year ago level, BDSA notes.

Foreign demand for refined copper continued at a high level as US exports reached 59,000 tons, the government agency reports. Chief markets were in the United Kingdom and West Germany.

US supplies of refined copper rose to 167,000 tons during the month, up 8 percent from July, but not up to the June level of 176,000 tons.

Receipts of copper-base scrap at plants rose to 76,000 tons, up 14,000 from July; consumption hit 68,000 tons, up 20,000 from July. Exports of copper-base scrap and ingot were about unchanged at 16,000 tons.

Shipments of brass mill products in the second quarter of 1960 were down 2 percent from the previous period, the Census Bureau reports.

In the same quarter, brass and bronze foundry product and copper-base powder mill products were down about 7 percent, but copper wire mill items rose 2 percent, according to Business & Defense Services Administration.

With the exception of unalloyed tube and pipe, and sheet and strip, all segments of the brass mill group declined from the first quarter, the agency goes on to note.

Shipments of unalloyed tube and pipe, however, rose from the previous quarter's 104 million pounds to 128 million for a 23 percent gain. Sheet and strip remained unchanged from the first quarter at 44 million pounds but were 5 million pounds less than for the same period of last year, the agency notes.

Copper wire mill shipments, which had stayed fairly level for the previous six months, rose slightly to 393 million pounds in the second quarter, according to the BDSA report—about 2 percent higher than the 386 million pounds for the first quarter, though they were 5 percent less than in second quater 1959 when shipments totaled 412 million pounds.

Fluorspar—Domestic mine production

Heavy Chemicals

of fluorspar ore totaled 127,400 short tons in the second quarter, Mines Bureau reports. Mills recovered 50,100 tons of finished fluorspar in processing 135,300 tons of ore. Total output of finished product was 53,600 tons, including 3,500 tons of material marketable as mined, Mines reports.

Shipments totaled 59,800 tons, valued at $2,577,300, Mines notes. Imports for consumption in this quarter were greater than those in the corresponding period of 1959. Consumption, though, declined during the period, the agency adds.

Accounting for the latter, Mines notes, was diminished use at hydrofluoric acid plants and slight decreases in all other principal outlets.

About 4.6 pounds of fluorspar were consumed per short ton of steel produced at plants using the raw material during the quarter, Mines concludes.

Lead—With a 7 percent increase in mine production, new supply of lead was higher by about 15,000 tons in August; and domestic consumption increased by 14,000 tons, the Bureau of Mines reports.

Mercury—The prevailing price range of $209 to $212 a flask for large lots was maintained against moderate to slow buying interest, sources in the trade reported.

Silver—Price was still unchanged at its long standing level, quoted on Friday at 91⅜c. a troy ounce, spot.

Tin—Straits metal closed at $1.04 a pound, unchanged from a week ago; in a slow market.

Zinc—Smelter output of slab zinc rose in October to 63,005 tons from 60,004 the month before, the American Zinc Institute reports. Domestic shipments showed a slight advance to 58,572 from 58,137 tons the month before. With exports included, total shipments were lower, however—65,183 in October as against 68,182 in September.

Stocks closed the month at 190,288 tons, inexplicably down from the previous month's 192,466. Daily average production worked out to 2,032 tons, down from 2,000 for the previous month.

For the year to date, output stands at 733,855 tons, domestic shipments at 639,943 tons, total shipments at 697,986 tons, and monthly average production at 73,386 tons, AZI notes.

The October production breakdown runs as follows:

- Special high grade zinc, 24,748 tons in October, as against 23,772.
- High grade, 3,736 tons, as against 2,244.
- Intermediate, 503 tons, as against 1,238.
- Prime western (including select and brass special), 34,018 tons as against 32,750.

Larrick, Oserto Lead Food Law Meeting Sessions

George P. Larrick, United States Commissioner of Foods and Drugs, and Dr. Bernard L. Oser, president of Food & Drug Research Laboratories, have been named panel moderators for the forthcoming joint annual conference of Food & Drug Administration and the Food Law Institute. The meeting will be held November 28 and 29 in Washington.

For the FDA session, Monday morning, Mr. Larrick will lead members of his staff in a discussion on the food, drug and cosmetic act; the food additives amendment; the color additives amendments; the hazardous substances labeling act, and legislative prospects for 1961.

During the industry session to follow that afternoon, papers will be read by Dr. Richard S. Gordon, Monsanto Chemical Company; James D. Kittelton, Manufacturing Chemists' Association; Dr. Margaret Ives, American Can Company; Joseph D. Becker, Allied Chemical Corporation, and Dr. Robert Johnson, Kroger Company.

Representatives of the consuming public are slated to hold a panel discussion Tuesday morning with Dr. Charles Glen King, executive director of the Nutrition Foundation, as moderator.

A question and answer session that afternoon will be presided over by Franklin M. Depew, president of the Food Law Institute.

GSA Buys Some DDT

—Continued from page 5

N. J., 6 million pounds at 22.73 cents a pound.

In the bidding for the 1,813,000 purchase offer of GSA, seven companies participated with prices ranging from a low of 22.39 cents a pound, quoted by Allied, on a quantity offering of 400,000 pounds to a high of 25.49 cents a pound with a discount of one-eighth of one percent for payment in twenty days quoted by Pesticide Sales Corporation, New York.

Other bidders and their prices were:

Diamond Alkali, 22.48 cents a pound for whatever quantity of DDT that GSA did not take up from the October 24 offering of Diamond.

Lebanon Chemical Corporation, Lebanon, Pa., 23.40 cents a pound on 960,000 pounds for shipment to Bombay, or 25 cents a pound if the material is to be shipped to Calcutta, with a 3 percent discount for cash.

Montrose Chemical, 23.44 cents a pound on the entire lot for shipment to Bombay and 22.62 cents a pound for shipment to Calcutta.

Olin Mathieson Chemical Corporation, Baltimore, Md., 22.99 cents a pound on the entire offering.

Pittsburgh Plate Glass Company, Pittsburgh, Pa., 23.55 cents a pound on 500,000 pounds.

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Data Offered

A technical bulletin describing the use of "Syton 200," an **aqueous colloidal silica sol,** has been made available by Monsanto Chemical Company's inorganic chemicals division, 800 North Lindbergh blvd., St. Louis 66, Mo. The bulletin, No. 1-199, covers the ceramic investment shell casting process, industrial ceramic shell production, foundry procedure, slurry preparation and stucco applications. Four pages of illustrations are included.

How to cope with **instability of polyethylene, polypropylene** and **polyvinyl plastics** in the presence of light and oxygen is the subject of a new brochure just released by Guardian Chemical Corporation. Copies are available from the company at 38-15 30th street, Long Island City 1, N. Y. To cope with these problems, the brochure recommends a new stabilizer, "Voidox," which is said to prevent damage by light and oxygen and to produce an inherent plasticizing effect.

"Proceedings of the Forty-Sixth Mid-Year Meeting," of Chemical Specialties Manufacturers Association has just been published. Its 256 pages contain all papers, discussions and committee reports presented at the meeting, which was held last May in Chicago. Copies are available at $7.50 each, postpaid in the US and Canada, and $8 each, postpaid to other countries, from the association at 50 East 41st Street, New York 17.

Results of tests upon **"Tenite" polyethylene** formulations with high resistance to sunlight and outdoor weathering are described in "Materials Bulletin No. 5," just issued by Eastman Chemical Products, Inc., a subsidiary of Eastman Kodak Company. Copies are available from the firm's plastics division at Kingsport, Tenn. The tests reportedly show that the effectiveness of the inhibitor is not impaired by molding or extrusion temperatures as high as 600 degrees Fahrenheit. Film produced from the formulations is said to retain a high degree of clarity and to remain smooth, pliable and tough after twenty-four months of exposure.

Chemetron Corporation's chemical products division has published a new catalogue of its Girdler line of **catalysts** for gas processes, the petroleum and chemical industries, food processing and other applications. Copies are available by writing Girdler Catalysts, P. O. Box 337, Louisville 1, Ky. Properties and uses are given in connection with steam-hydrocarbon reforming, hydrogenation selective hydrogenation and nitrogen oxide removal. Nickel, cobalt, molybdenum, copper, palladium and platinum type catalysts in various stages of development for a wide variety of processes are included.

Monsanto Chemical Company has published through its inorganic chemicals division a thirteen-page technical bulletin describing the use of **phosphoric acid** as a soil stabilizer in highway construction. Copies of Booklet 1-186 are available by writing the division at 800 North Lindbergh boulevard, St. Louis 66, Mo. Topics covered include subgrade and base course stabilization with phosphoric acid, field and laboratory tests and results, test procedures and properties of the product. Illustrations show application methods, and laboratory test results are incorporated in various charts.

Sun Oil Company has a new technical bulletin giving data and recommended use for eleven **straight distilled "Circo" oils** with viscosities ranging from 55 SUS at 100 degrees Fahrenheit to 140 SUS at 210 degrees. Copies are available from the company's industrial products department at 1608 Walnut street, Philadelphia 3. The oils are recommended for hydraulic and circulating systems operating below 120 degrees, or where Fuller's Earth filters are used to remove contamination and recondition the oils for extended use.

Synthetic Organic Output Up in 1959

Synthetic organic chemicals and their raw materials were produced to the tune of 89,874 million pounds last year, which was 12.3 percent more than the revised figure of 80,007 million pounds for 1958.

So says the Tariff Commission in releasing its forty-third annual report on production and sales of synthetic organic chemicals in the United States.

Sales of synthetic organics and their raw materials last year amounted to 52,973 million pounds, compared to 43,309 million pounds, in the previous year. They were valued at $7,267 million in 1959, as compared to $5,953 million in the previous year.

(As the above totals include data for chemical raw materials, as well as semi-finished and finished products, they necessarily involve considerable duplication.)

The report comprises three major sections—those on chemical raw materials, cyclic intermediates, and finished synthetic organic chemicals products.

Tar, Oil and Gas Chemicals Report

The first section includes statistics on tar, tar crudes, and crude chemicals derived from petroleum and natural gas. Total production of coaltar, water-gas tar, and oil-gas tar in 1959 amounted to 669 million gallons—4.1 percent less than the 698 million gallons reported for 1958. Production in 1959 of all tar crudes amounted to 8,447 million pounds, compared with 8,879 million pounds) revised figure) in 1958.

The most important individual products in this group are benzene, toluene, naphthalene, and creosote oil. The output of crude products from petroleum and natural gas in 1959 was 24,422 million pounds, compared with 20,903 million pounds in 1958. Included in this group are benzene, toluene, xylene, and other cyclic products, and aliphatic hydrocarbons such as ethylene, propane, and 1,3-butadene, the latter being one of the basic raw materials for the manufacture of S-type synthetic rubbers.

Production of cyclic intermediates, which is covered in the second section of the report, amounted to 8,459 million pounds in 1959, or 27.3 percent more than the 6,643 million pounds reported for 1958.

As in earlier years, more than 60 percent of the output of cyclic intermediates in 1959 was used by the original manufacturers to produce more advanced products.

The third section of the report deals with finished synthetic organic chemicals and chemical products. The total output of such products amounted to 41,855 million pounds in 1959, compared with 36,603 million pounds in 1958. Of this total, cyclic finished products accounted for 7,913 million pounds and acyclic products, for 33,943 million pounds.

All the eleven groups of finished synthetic organic products were produced in greater quantities in 1959 than in 1958. The groups for which the greatest increases were shown were plastics and resin materials (29.8 percent), plasticizers (28.9 percent), elastomers (28.3 percent), rubber-processing chemicals (24.4 percent), dyes (21.1 percent), and toners and lakes (20.6 percent).

Allied Gets New Process

—Continued from page 7

Canada. The process, which has been under study by Allied for some months, differs from that currently in use by Allied, the sole producer of caprolactam in the United States.

Starting with raw material toluene instead of phenol, the addition of the Snia Viscosa process to Allied's Hopewell, Va., complex, is expected to provide Allied with broad flexibility in its operations, including the production of derivatives and intermediates of commercial importance other than caprolactam.

Metals to Use 1.5 Million Tons of Sulfuric

—Continued from page 3

division. Nineteen reagents are required to recover lead and zinc.

Thirteen different classes of chemicals are reported by Mallinckrodt Chemical Works to be necessary for uranium ore processing. Refractory metals recovery (columbium, tantalum, molybdenum, vanadium and tungsten) is also heavily reliant on chemicals.

Prospects for growth of chemical use in metals are good, judging by past history alone: Output of steel in 1890 was 5 million tons; in 1957, it reached 113 million tons. Aluminum output, 69,000 tons in 1920, reached 1.95 million tons last year.

In addition, growth of electrolytic manganese looks promising. Output was 13,000 tons in 1957. Since that time, a new plant to produce 5,000 tons a year has been announced, along with 10,000-ton-a-year and 1,500-ton-a-year expansions in two others.

Titanium and Zirconium

The reactive metals, titanium and zirconium, are good chemical customers. Chemical requirements for titanium sponge production include the following:

Ilmenite (or rutile), petroleum coke, chlorine, oxygen, magnesium, argon, sodium, hydrochloric acid and caustic soda, depending on process.

Zirconium manufacture by the "Nitrophos" process requires zircon, caustic soda, nitric acid, tributyl phosphate, kerosine, carbon and chlorine.

Via the Bureau of Mines process, petroleum coke, methyl isobutyl ketone, ammonium sulfocyanide, caustic, hydrochloric acid, sulfuric, anhydrous ammonia, carbon, chlorine, sugar and carbon dioxide are required along with magnesium or sodium argon, depending on refining process.

However, the titanium industry is in the throes of a depression with production of more than 16,000 tons a year far exceeding even the 1964 forecast of use at 6,000 tons per annum.

In addition, there is a 27,500 ton government stockpile of titanium sponge which was produced when the initial pressure for providing productive capacity was present.

Disposal of this stockpile would have disastrous effects on production at the foreseeable forecast levels. Output forecasts for the next few years are not based on release of this stockpile.

The prediction that consumption of titanium metal will rise to 6,000 tons a year in 1964 is based on gradual expansion of titanium in the chemical field as well as foreseeable demand in the aircraft industry for airframes and engines.

And if the titanium industry is in trouble now, the zirconium industry isn't far behind. In fact, it's just where the titanium business was three years ago.

At the present time, all producers are making metal at their contracted rate for the Atomic Energy Commission and the excess produced over actual use is being stockpiled.

These contracts will expire in 1963 and their continuation is in doubt. The potential market for zirconium metal is based on:

Basis of Zirconium Potential

- Commercial outlets for corrosion-resistant properties.
- Outlets for reactor-grade metal for commercial power reactors, both domestic and foreign.
- Application of reactor-grade zirconium in the military field.

Utilization of zirconium in reactor programs is premised on consumption of about 0.4 pound of zirconium in the final mill form for each kilowatt hour of electrical output by the reactor.

Since about two pounds of sponge are required for each pound of metal in the final mill form, the sponge requirement can be closely estimated provided the size and number of reactors using zirconium core elements can be estimated.

Right now, zirconium capacity is judged at about 2,300 tons a year, with utilization not expected to hit 1,000 tons annually until 1962. By 1964, consumption could reach around 1,400 tons.

The refractory metals (columbium, tantalum, molybdenum, chromium, tungsten and vanadium), by their very properties, require chemical rather than pyrometallurgical processes for production of the pure metals from their raw materials.

Annual output of these metals is still small: 1959 saw sixty-five tons of colum-

—Continued on page 41

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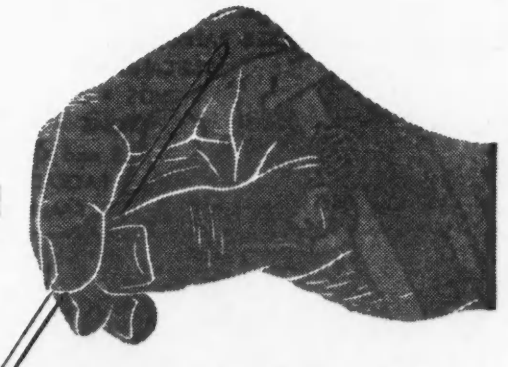

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Petroleum Derivatives

Turning into the end of the year most industrial indices point downward. Car production has started to dip in the last week after a first of the season burst, steel capacity rate hovers barely over fifty percent and housing starts are off. Despite what appears to be a general slowdown in economic activity, demand for aromatic solvents is sustained above the general level of industrial production. Benzene remains tight with demand strong. Prospects of the 34 cent contract price continuing after January 1 are good. Toluene movement is brisk on calls for avgas and is expected to be buoyed in the near future by demand for conversion to benzene and a process to convert toluene into phenol. Also in the works is a process to make caprolactam using toluene instead of phenol as raw material. Developed in Italy and the right acquired by a US firm, the process is not yet on a commercial basis but is expected shortly to be so employed at the American firm's Virginia plant. Xylene output this year is remarkably higher than last year with demand for the fractions, particularly ortho, leading the way.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 13, 1959
103.74	103.74	103.74	103.04

For Current Prices see page 9

Aromatic Solvents

Benzene—Tight supply continues to be the outstanding characteristic of this chemical.

Despite the upward surge of production this year accomplished by petroleum processors and cokeoven operators, sources report that inventories are not at acceptable levels.

Reflecting the tight supply situation are brisk calls from both domestic and export areas of the market. In fact demand from overseas has tripled the amount of US exports as compared with last year while cutting imports into the US by almost a third.

To consumers the one bright aspect of the situation is that price has held firm at 34c., contract basis, although spot prices have gone as much as 12c. higher on occasion. Indications are that the 34c. contract price will continue to hold at the first of the year despite tight supply.

Opinion in the trade is that there is more to be gained by maintaining current schedule than by instituting a price increase. Referring to the increased number of benzene plants already due in '61, trade observers feel a price hike would trigger even more capacity. Result might then be a sloppy supply situation which could cause retrograde price adjustment below present contract level.

Toluene—Demand is well sustained, reports the trade, and is increasing counter to long term predictions of a steady decline.

Also noted is the adoption of a firm supply posture, a situation far changed from the sloppy supply picture encountered earlier in the year.

In the current market heavy calls from military aircraft still dependent upon avgas—troop airlift planes, weather types, reconaissance craft—have boosted demand.

Then, too, exports have jumped 209 percent over last year on the basis of figures compiled through August. First eight months of this year show 37.6 million gallons leaving US ports as compared with 17.9 million gallons in the same period last year.

Future increased consumption is expected from "Hydeal" units now building which will convert toluene into the higher priced benzene.

Also on tap is a west coast plant which in 1961 is expected to be producing phenol from toluene. Then, too, a US firm has acquired an Italian process to make caprolactam from toluene instead of phenol. Currently non-commercial, the process is under study and is expected to be employed at the American firm's Hopewell, Va., plant. One advantage to the toluene process is said to be the flexibility it will provide the producer in choice of materials.

Xylene—Production this year is far outstripping last year's totals.

In the first eight months of 1960 some 210.6 million gallons were turned out as compared with 144.6 million gallons in the same period last year.

Figuring large in the upturn in production has been demand for xylene fractions.

Ortho has been the leader in this area of xylene demand and is expected to loom even more influential as time passes.

Reason is the continuing shortage of naphthalene for production of phthalic anhydride.

Naphthalene has been in short supply for over two years so that ortho-xylene is being employed by some producers in phthalic production. Some questions have been raised as to the efficacy of employing ortho but these problems have either been solved or ignored in view of the unabated naphthalene shortage.

Since no increase in naphthalene supply is anticipated before the second half of 1961 it is expected demand for ortho will be well sustained at least until then and perhaps beyond if ortho price is cut below naphthalene levels as some observers think it might soon be.

Solvent Naphtha—One trade source reports a decided increase in demand in the last four months for solvent naphthas in the partial and straight aromatic categories.

Demand was triggered initially by a price reduction this summer designed to stimulate sales to paint formulators who had been employing xylene which until the price reduction had been less expensive than the solvent naphthas.

After the attraction of lower prices, demand was further accelerated by the use of acrylic paints in the finishes of new '61 model autos of the big three motor companies.

Straight aromatic solvent naphtha in the 310 to 360 F. boiling range in tankcars is priced at 29c., New York and New Jersey. In the higher boiling range—355 to 420 F., price is 30c.

Waxes

Supply of microcrystalline and paraffin waxes is reported as adequate by trade sources. Demand continues well sustained by calls from all consuming areas.

Trade sources last week made reference to the polyethylene coated milk container shown at a Chicago convention recently. Confirming that one type of polyethylene container is currently in use in upstate New York, trade sources indicated that the impact on the wax business is, and will be, nominal. Pointing out that although there were certain advantages to the polyethylene container——less leakage, better appearance, no flaking—there were also several distinct disadvantages, most of them centering around cost.

To cite one example, wax cartons are coated after they are formed into permanent shape while the polyethylene carton is coated while still in original sheets of paper thus creating added costs in terms of waste and scrap recovery of sheets after they are cut and formed. In addition sources say that capitalization costs of equipment to employ the polyethylene method present an obstacle.

In terms of quality, observers point out that polyethylene, while adding the usual waterproofing to the paper, does not impart the strength that wax adds when coated on the container form. Thus expansion of the polyethylene container may be expected to be greater than that of its wax counterpart.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Oct. 29 totaled 230,809,000 barrels, according to data reported by the Bureau of Mines, compared with the total of 229,816,000 barrels for the preceding week, this represents an increase of 993,000 barrels, comprising an increase of 1,821,000 barrels in stocks of domestic crude and a decrease of 828,000 barrels in stock of foreign crude.

Metals to Use 1.5 Million Tons of Sulfuric

—Continued from page 39

bium, 125 tons of tantalum, 1,200 tons of molybdenum, 700 tons of tungsten, 2,000 tons of chromium and a few hundred pounds of vanadium produced.

A pound of chromium takes about one pound of sulfuric acid, 2.04 pounds of sulfur dioxide, 0.22 pound of sodium carbonate and 1.07 pounds of ammonium sulfate.

Tantalum is derived by varying processes generally requiring hydrofluoric acid, sulfuric acid, ammonia, methyl isobutyl ketone, potassium fluoride, argon, helium, hydrogen or sodium depending on process.

Molybdenum is roasted to oxide, which is treated with ammonium hydroxide to form the pure molybdate. Heating in air produces molybdic acid. Powder is obtained by hydrogen reduction. About 0.7 pound of ammonia and 17.2 cubic feet of hydrogen are required to make a pound of molybdenum powder from MoO_3.

Chemicals in Tungsten Production

Tungsten manufacture includes use of caustic soda, calcium chloride, hydrochloric acid, ammonia and hydrogen. Vanadium uses one pound of soda ash, 1.25 pounds of ammonium chloride, 1.5 pounds of ammonium sulfate, 2 pounds of vanadium pentoxide, 4.25 pounds of calcium and three-quarters pound of iodine.

In vanadium production, it takes a pound of soda ash, 1.25 pounds of ammonium chloride, 1.5 pounds ammonium sulfate, 2 pounds of vanadium pentoxide, 4.25 pounds of calcium and three-quarters pound of iodine to make a pound of high-purity metal.

Consumption of caustic soda in the production of primary aluminum is likely to hit 313 million pounds by 1970, compared with 221.4 million pounds this year. The following table shows estimates for chemical requirements of aluminum, magnesium, and beryllium manufacture.

*Chemicals in Light Metals**

	1960	1965	1970
Aluminum:			
Caustic Soda	221.4	367.2	513.0
Soda Ash	417.0	691.6	966.2
Petroleum Coke	1,578.5	2,618.0	3,657.5
Pitch	682.7	1,132.2	1,581.8
Cryolite	162.5	170.0	237.5
Aluminum Fluoride	123.0	204.0	285.0
Magnesium:			
Fluorine	74.7	102.6	111.5
Ferrosilicon	15.2	34.7	56.3
Dolomite	165.1	377.3	613.1
Fluorspar	2.3	5.1	8.4
Beryllium:			
Sulfuric Acid	7.1	11.5	18.0
Ammonia	0.24	0.36	0.56
Caustic Soda	10.5	16.7	26.1
Soda Ash	2.1	2.5	5.9
Hydrofluoric Acid	1.7	3.2	5.9
Lead Dioxide	0.17	0.36	0.5
Magnesium	0.5	0.9	1.2
Copper Powder	0.84	0.98	1.16
Copper Metal	7.8	9.2	10.8
Sodium Silicofluoride	2.6	5.6	8.9
Ferric Sulfate	4.0	6.3	9.9
Ammonium Sulfide	0.12	0.22	0.37
Ammonium Bifluoride	0.82	1.5	2.7
Ammonium Persulfate	0.11	0.22	0.4
Chelates	0.47	0.84	1.4
Carbon Powder	0.28	0.36	0.38
Beryl	16.3	25.5	40.2

*Millions of pounds.

Nickel also has its large-volume chemical needs. The table below shows estimated annual requirements for chemicals for electrorefining and chemical refining of nickel. In the case of ammonia and sulfuric acid listed under chemical refining, the outside figure assumes operations of the Nicaro and Moa Bay plants in Cuba.

Chemicals for Nickel

	Millions of Pounds
Chemical Refining:	
Ammonia, Anhydrous	85-150
Carbon Dioxide	Large
Sulfuric Acid	25-1,000
Lime ($CaCO_3$)	Large
Hydrogen	1-2.5
Hydrogen Sulfide	1-50
Ammonium Sulfate	0.2
Ferrous Sulfate	0.1
Iron Powder	0.1
Polyacrylic Acid	0.1
Sodium Cyanide	0.1
Sodium Sulfate	0.1
Sodium Sulfide	0.1
Stearic Acid	0.1
Electrorefining:	
Boric Acid	1.6-2
Sulfuric Acid	20-50
Chlorine	8-12
Hydrochloric Acid	0.5-1
Nickel Carbonate	0.2
Nickel Powder	0.2
Nitric Acid	0.2
Soda Ash	30-40
Sodium Hydroxide	0.5
Sulfur Dioxide	1-1.5

The above story is based on papers presented at the CMRA meeting by J. D. Sullivan of Battelle Memorial Institute; T. D. Jones of Asarco; F. Fahnoe of Reactive Metals, Inc.; J. U. Shepardson of Mallinckrodt; C. A. Hampel, a consulting chemical engineer; R. W. Hyde of Arthur D. Little, Inc.; and C. A. Hochwalt, jr., A. E. Rea and K. G. Robb of International Nickel Company. The steelmakers table on page 3 is based on figures presented by J. S. Doerr of United States Steel Corporation.

SOCMA Slate Is Headed

—Continued from page 7

association's general membership at the annual business meeting in New York on December 8. Other nominees:

First vice-president, Chester M. Brown, president of Allied Chemical Corporation, New York; second vice-president, Arthur P. Kroeger, assistant general manager of the organic chemicals division, Monsanto Chemical Company, St. Louis, Mo., and treasurer, Dr. Robert L. Bateman, manager of marketing services for Union Carbide Chemicals Company, a division of Union Carbide Corporation, New York.

Nominated for three-year terms on the association's board of governors are:

Louis F. Loutrel, jr., sales vice-president of Maumee Chemical Company Toledo, Ohio, and Carl S. Oldach, assistant general manager of the organic chemicals department of E. I. duPont de Nemours & Co., Wilmington, Del.

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Aliphatic Organics

An economist for the undisputed giant of the chemical world predicted last week that production of chemicals and chemical products this year will rise 7 percent from 1959, hitting an all-time high. But his crystal ball revealed no further gain in 1961. Basic organic chemicals production, he said, will exceed 1959 by approximately 14 percent but drop 3 percent below the higher level in 1961.

On the other hand, for drugs, toiletries and miscellaneous chemicals he forecast an 8 percent increase in output this year, and 5 percent next. Getting down to major markets for organic chemicals, he made these predictions:

- Plastics production will rise 4 percent this year over 1959 and show a gain of 3 percent in 1961.
- Synthetic rubber will be up about 9 percent in 1960. Next year, however, a drop of approximately 4 percent is likely. This would follow from anticipated declines in production of automobiles and machinery.
- Man-made fiber production will increase 4 percent in 1960, but decline about 3 percent in '61. Output is expected to rise in the latter part of the year, however, as textile production recovers.
- Soap and synthetic detergents production is likely to increase one percent in 1960, but decline about 2 percent in '61, reflecting lower industrial requirements for soap and detergents in the textile industry.

If the predictions pan out, competition among organic chemicals producers will undoubtedly grow more intense. This, in turn, could lead to more price cuts and call a halt to expansion plans. At the same time, it could spur the search for foreign markets and encourage overseas ventures, seemingly the only out if domestic requirements don't approach productive capacity.

Exports of organic chemicals in September followed a mixed pattern. Up notably were shipments of methanol, glycerine, and butyl acetate. Below the August level: acetone, butyl alcohol, formaldehyde, and propyl alcohol.

Domestic production the preceding month was generally higher than in July. Big increases were noted in output of acetone, butadiene, formaldehyde, methanol, and pentaerythritol.

Acrylates—Prices for ethyl and methyl acrylates were recently reduced 1¾c. and 4¾c. a pound, respectively. Action set the tankcar price of both chemicals at 32¼c. a pound.

Behind the reductions, reportedly, was the desire to spur demand from present-day end-users and broaden markets.

Methyl acrylate is used principally as a chemical intermediate, ethyl acrylate in the production of emulsion polymers for a wide range of applications.

Acetone—After hitting a record high in August (2,119,915 pounds), exports fell to 750,201 pounds in September. The entire quantity was valued at $50,818, according to statistics just released by the Foreign Trade & Economics Operations Division of the Bureau of Census, US Department of Commerce.

Indicated is that the large quantity of US-manufactured acetone purchased by the Netherlands in August (1,139,620 pounds) was a one-shot order. This was assumed initially, of course, because the Dutch had bought no acetone here during the two previous years.

In September, the largest shipment went to Mexico (688,563 pounds at $43,402). Comparatively minor, other shipments went to Australia (17,850 pounds at $1,399) and Guatemala (10,860 pounds at $1,332).

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 13, 1959
130.70	130.70	131.10	132.95

For Current Prices see page 9

Butyl Acetate — September exports amounted to 4,957,739 pounds and were valued at $586,361. The largest shipment went to The Netherlands (3,467,831 pounds at $386,152). Accounting for most of the remainder, Belgium took 1,171,014 pounds at $156,763.

The same month, exports of butyl alcohol were 5,149,475 pounds, valued at $667,172. This material went mainly to Belgium (3,300,812 pounds at $441,877) and The Netherlands (1,540,976 pounds at $178,169). Next largest shipment—126,708 pounds at $17,957—went to Canada.

Domestically, markets for butyl acetate and butyl alcohol are firm. Supplies, assumed to be tight last summer when exports dropped to below normal levels, are adequate and prices unchanged and strong.

Corn Syrup—Prices were advanced 1c. per cwt., effective October 24. This was to offset the recent rise in freight rates.

Currently established are these prices, applicable to corn syrup of 43 degree Baume, delivered in New York: tankcar, $6.30 per cwt., carlot of openhead returnable drums, $6.73 per cwt.; carlot of tighthead non-returnable drums, $7.23 per cwt.

Dextrine — Compensating for a recent rise in freight rates, a major producer has increased dextrine prices by 1c. per cwt. The change was effected October 24. Two weeks earlier, prices were reduced 20c. per cwt., in keeping with the lower price on corn.

Formaldehyde—September saw exports of formaldehyde drop to 401,875 pounds, valued at $25,194, from 1,975,510 pounds in August. But the figure, nonetheless, represented a substantial improvement over July, when a mere 263,848 pounds were exported.

Canada, taking 355,400 pounds at $19,438, was the principal buyer of US-manufactured formaldehyde in September.

Major users of formaldehyde resins for bonding, plywood producers are still struggling to strike a balance between supply, which is oversize, and demand that's appreciably smaller. Their efforts have not gone totally unrewarded, however, since the price of a key grade of fir plywood is up to $66 per thousand feet, from the $60 quote reported early in August. This was the lowest prices had gone in the post war period.

A major producer closed its plywood plant on November 3, in a move that it described as necessary to keep production in line with demand. The firm indicated that it planned to resume operations on November 14.

A month earlier, this same firm reduced its output of plywood to 67 percent of

Aliphatics Foreign Trade: September

Exports of selected industrial aliphatic organics for the months of August and September, 1960, as reported by the Bureau of Census, were as follows:

		September	August
Acetone	lbs.	750,201	2,119,915
Alcohols, including, glycols, n.e.c.	lbs.	14,700,079	13,825,534
Butyl acetate	lbs.	4,957,739	2,419,903
Butyl alcohol	lbs.	5,149,475	5,694,966
Carbon Bisulfide	lbs.	357,600	*
Carbon Tetrachloride	lbs.	332,670	*
Ethyl alcohol	gals.	0	326,030
Ethylene glycol	lbs.	7,485,026	6,644,968
Formaldehyde, 40 percent solution	lbs.	401,875	1,975,510
Glycerine, crude and refined	lbs.	1,318,085	609,481
Methyl alcohol	gals.	4,005,541	1,483,338
Propyl alcohol	lbs.	539,623	3,897,992

* Not previously reported here.

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Beryllium Resources, Inc., Dynamic Metals to Merge

The boards of directors of Beryllium Resources, Inc., and Dynamic Metals Corporation have voted in favor of merging, with Beryllium Resources, Inc., to be the surviving company.

Beryllium Resources is active in exploration and development of beryllium ores. Dynamic Metals has developed a new flotation process for the concentration of beryllium minerals.

Brush Beryllium Company, Cleveland, Ohio, and E. Van Dornick, vice-president of Dynamic Metals and developer of the flotation process, will acquire an interest in the surviving company.

All stock will be owned by Brush Beryllium Company, Federal Resources Corporation, Salt Lake City, Utah, the Hidden Splendor Mining Company, Salt Lake City, and E. Van Dornick.

Canadian Paint Maker Slates Jamaican Facility

Brandram-Henderson, Ltd., of Montreal, has slated a new 150,000-gallon-a-year paint plant for Kingston, Jamaica. Construction will be started "as soon as possible," with completion expected early in 1961.

The unit will produce for the Jamaican market the line of "B-H" plants now turned out for the Canadian market by plants in Montreal, Halifax and Vancouver.

Gov't Vs. Oil Companies

—*Continued from page 4*

United States; limit their exportation from the United States; restrict the sale or distribution of petroleum products in foreign nations; or exclude third persons from competing in the production, refining, distribution or sale of crude oil.

These injunctions apply to any combination affecting the trade or commerce of the United States with foreign nations. Exceptions are provided with respect to requirements of foreign law, or an official request of a foreign government, failure to comply with which would subject the defendants to risk of lising that part of the business subject to the request.

The defendants are further prohibited, subject to certain exceptions such as a requirement of foreign law, from participating in joint marketing companies with any of the other defendants which are subject to a similar judgment, and from acquiring an interest in joint marketing companies controlled by British Petroleum Company, Ltd., or the Royal Dutch Shell partnership, or controlled by such companies in conjunction with defendants.

The judgment against defendant Standard Oil Company (New Jersey) provides that most of the assets of Standard-Vacuum Oil Company shall be divided between the two partners, Standard of New Jersey and Socony Mobil.

Standard-Vacuum, with assets of $855 million, is primarily a marketing company in the Far East, with sales of over a billion dollars in 1959.

Following a division of the assets of Standard-Vacuum Company, each of the partners, Standard of New Jersey and Socony Mobil will operate independently in areas formerly served by the joint company.

The judgment expressly does not cover joint production, refining and pipeline operations which are located solely within a foreign country or countries.

But such joint companies, controlled by defendants subject to judgments such as the one just entered, may not engage in marketing, with certain exceptions such as a requirement of foreign law.

Each participant in such an arrangement must market independently. Additionally, exceptions as to operations in certain countries are provided.

Polyethylene: French Aim

—*Continued from page 4*

tion in France was about 31,400 metric tons at the beginning of the year, and will reach 51,000 tons annually by the end of 1961. The production is in the hands of the following five firms:

- Ethylene Plastique (Mazingarbe)—high-pressure; capacity 6,000 tons a year; no expansion planned.
- Ethylene Plastique Normandie (Port-Jerome)—high pressure; increasing capacity from 14,400 tons to 30,000 tons a year by the end of 1961.
- Normandie de Matieres Plastiques (Port-Jerome)—Ziegler process; 5,000 tons a year; no expansion planned.
- Manufacture Normande de Polyethylene (Gonfgreville)—Phillips; capacity 6,000 tons annually, no expansion planned.
- Naphtachimie (Lavera) — Ziegler; 4,000 tons a year by the end of 1961.

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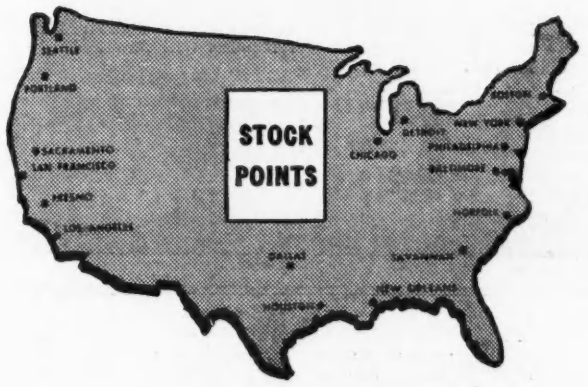

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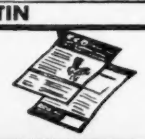

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Space Agency Spells Out Patent, Copyright Policies

Regulations covering the patent rights, data and copyrights in inventions and documents made in the performance of work contracts with the National Aeronautics & Space Administration have been announced by the agency.

As published in the November 11 issue of the *Federal Register*, the regulations implement the policies of NASA, in connection with the procurement of supplies and services, with respect to:

- Inventions made in the performance of work under contract with the agency.
- Patent infringement liability of the United States resulting from work performed under contract with NASA.
- Security requirements covering patent applications containing classified subject matter.
- Patent royalties payable in connection with performance of contracts with NASA.

The policies and instructions prescribed in the regulations are applicable to contracts which are to be performed within the US, its possessions and Puerto Rico. The agency advises inquirers to contact the general counsel for policies, instructions, and contract clauses to be used in contracts performed outside the US.

SAACI's Clinic Maps Roads

—*Continued from page 7*

To meet the downturn, he suggested a maximized, super-vitalized sales effort, with increased attention to the customer's needs.

"Let's not shilly-shally," cautioned panelist J. E. Newman, of American Mineral Spirits Company, "this whole question of depth selling, multi-level selling, depth penetration or what you will, is a ticklish one."

He defined the ticklish technic as multi-level selling in which "a relationship is established between several individuals in various capacities in a supplier company and their corresponding numbers in a consuming company for the mutual benefit of both companies."

Walter H. Burgess, northeast district manager for the chemical department of McKesson & Robbins, Inc., described eighteen characteristics of a top-flight salesman. Cheating, lying, character assassination and negligence, he noted were not among them.

The key to a more effective relationship between the field salesman and product management, said Clarence H. Sigler, is first, recognition and understanding of their mutual goal and individual responsibilities, and second, the understanding and skillful use of the specific communication tools available to stimulate and coordinate their individual efforts toward that goal.

Mr. Sigler, of United States Rubber's Naugatuck Chemical Division, offered these ideas for stimulating the flow of activity between product management and the sales force.

- Joint field visits to key accounts or key industries by both salesman and product manager.
- Periodic visits by the salesman to his technical service center to become familiar with new materials and processes, and to familiarize his technical people with special requirements that may arise."

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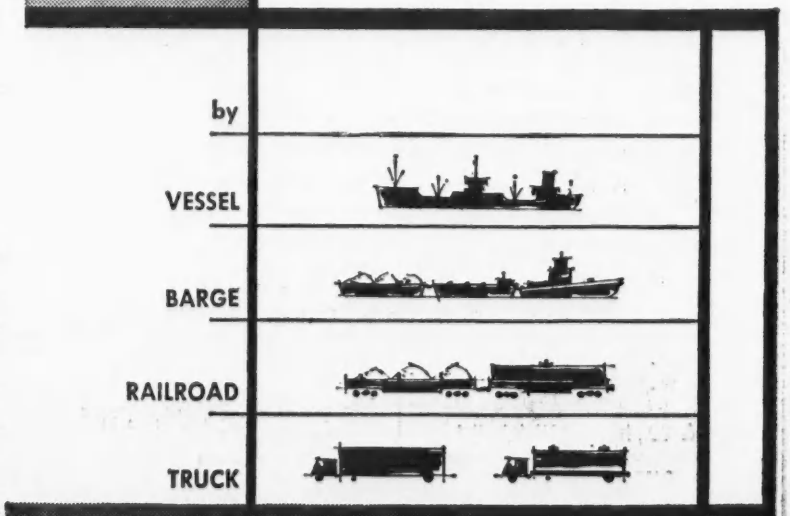

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American Potash Completes Sodium Chlorate Projects

American Potash & Chemical Corporation, Los Angeles, has just completed a 50 percent expansion of capacity at its Aberdeen, Miss., sodium chlorate plant.

Concurrently, the company finished an extensive modernization program at Henderson, Nev., involving replacement of a sodium chlorate recovery system. Both projects were begun last spring.

The company's "Trona" brand sodium chlorate is a starting material in the production of ammonium perchlorate—a high performance oxidizer used in propellants for missiles and rockets. Other uses are in paper pulp manufacture, uranium ore processing and agricultural chemicals.

Paint Prices to Rise

—Continued from page 4

vances that would go into effect December 12. A spokesman for duPont cited higher manufacturing and distribution costs and said the boost would average about 3 percent.

Costs have gone up all along the line these past three years. Key advances in naval stores and phthalic anhydride have caused comparable boosts in synthetic resins and phthalates, respectively.

Most dramatic of the increases has been in gum rosin, meaning higher tabs for all rosin-modified synthetic resins. For example, WW gum rosin today commands a price of $18.25 a hundredweight as against only $9.40 three years earlier.

Phthalic anhydride, reflecting the depressed rate of steel production, has been tight, with no prospect of relief in the immediate future.

Glycerine prices today run at a range of 18 to 20 cents a pound for crude natural material, as to grade, as compared with 15 to 16¼ cents a pound three years ago.

Today's lower prices on some of the metal oxides (lead, copper, etc.) and soybean oil, have not come close to offsetting the more numerous prices advances.

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Petroleum Derivatives

A major oil company has announced a new price schedule for toluene of 25 cents a gallon, f.o.b., refineries and terminals, based on the following points: Chicago, St. Louis, Houston, New York Harbor and Fall River. Posting becomes effective January 1. Cancellation of the 25 cent delivered price is the first change in quotation since April, 1958. Trade sources expect the f.o.b. basis will be adopted by the entire industry. Oil companies have until December 1 to notify customers of a first quarter 1961 change and cokeoven suppliers of toluene have a December 15 notification deadline.

Defining the current state of business has become a national pastime. As if one weren't in enough doubt already as to what to call it, speeches by two prominent executives last week gave very little aid indeed. One, by a president of a large oil company, referred to present economic conditions as a "business recession." Examining the future the oil executive felt that the current business decline would be sustained through mid-1961 and result in only a 2 to 2½ percent increase in demand for petroleum products in 1961 over 1960.

Somewhat more optimistically the president-elect of a major bank described present business as undergoing a "mild adjustment" which, in agreement with the oil executive, he predicted would be over in mid-1961.

The Texas Railroad Commission last week set a nine-day oil production schedule for that state's prorated wells for December. The nine-day basis is the highest rate allowed since April. The intervening seven months were restricted by the Commission to a record low eight days per month output.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 20, 1959
103.74	103.74	103.74	103.04

For Current Prices see page 9

Aromatic Solvents

Benzene—Tight supply of this chemical in domestic markets has not caused any great flow of foreign material into US ports—imports have diminished—in fact available benzene has been diverted from domestic consumers to foreign customers via exports.

Through the first nine months of this year benzene exports were recorded at 17.2 million gallons, over three times the 5.1 million gallon figure tallied in the same period last year.

Six countries took the bulk of export material. Together with the approximate volume they were: Italy—4.5 million gallons; Canada—3.3 million gallons; Japan—2 million gallons; Brazil—1.9 million gallons; United Kingdom—1.4 million gallons and Mexico—1.4 million gallons for 14.5 million gallons out of a total of 17.2 million.

In contrast imports have dropped with 25.5 million gallons reaching US ports in the period January-September this year as compared with 42.1 million gallons in the same nine-month period last year. Only three nations with shipments large enough to record are listed by the Tariff Commission as the origin of imported benzene. Together with approximate volume shipped to US ports they are: USSR—20.4 million gallons, France—4 million gallons and Canada—.6 million gallons.

Latest Tariff Commission report for September indicates no imports of benzene for that month although it is possible that material did arrive after the Commission closed its books on the month.

Exports of benzene in September fell behind volume for August. Shipments leaving US ports in September totaled 1,841,853 gallons as compared with 2,711,646 gallons in the previous month.

Country of destination, volume, value and Tariff Commission exit port designation for major shipments were:

United Kingdom—796,793 gallons worth $85,975 leaving Galveston.

Italy—565,306 gallons worth $178,367 leaving Galveston.

Canada—246,925 gallons worth $35,975, bulk of which left Buffalo.

Mexico—177,009 gallons worth $61,991 leaving Laredo.

Further down the list was Cuba with 28,872 gallons valued at $9,027 leaving from New Orleans.

Exports of toluene in September to all countries totaled 2,128,148, a sharp increase from the 792,649 gallons which left US ports in August. Total shipments through September this year are almost double the figure for the same period last year. In the first nine months of this year 39.7 million gallons were exported as compared with 20.9 million gallons in the same period in 1959.

Imports in September totaled 3,469,782 gallons valued at $92,660. All material originated in Canada and entered US at Detroit and Cleveland. August imports were only 152,757 gallons.

Toluene—A major oil company took the lead last week in revising the price schedule for toluene. Effective January 1 the petroleum company's posting becomes 25c. a gallon, f.o.b., refineries and terminals, based on Chicago, St. Louis, Houston, New York Harbor and Fall River. This is the first change in quotation since April, 1958 when the delivered price was instituted.

Xylene—Demand continues high according to reports from the trade.

Synthetic fiber production and metal finishing appears to be the mainstays as calls continue steady.

Turndown in auto rate with closing of some plants already a fact does not seem to have eaten into the market as yet. Any sustained action along this line, however, is bound to have a depressing effect.

Price competition in industrial areas still remains a factor with material moving below quoted prices on occasions in situations described as "localized" by trade observers.

Imports of xylene in September were nominal with only a little over 66,000 gallons arriving from Canada valued at $14,758.

Aliphatic Solvents

Mineral Spirits—Demand for regular and odorless spirits remains well sustained trade sources report.

Non-paint applications such as degreasing are stimulating regular spirits sales particularly while trade sources indicate movement of odorless spirits continues in good volume.

Price of odorless material, New York and New Jersey, is 30½c. and 29c. a gallon, respectively. Houston price is 25c.

Regular spirits, New York and New Jersey is 18c. a gallon and 14½c. in Houston.

Terms are f.o.b. terminal in tankcar.

Miscellaneous

Current reports of the industry for the week ended November 4, 1960 indicate an increase in crude-oil production and a decrease in crude runs. According to the API, the daily average output of crude (including lesae condensate) was 6,940,000 barrels, an increase of 119,000 barrels from the preceding week. Daily average crude runs to stills of 7,830,000 barrels were 104,000 barrels below the preceding week, and 149,000 barrels above the week ended November 6, 1959. Runs of foreign crude amounted to 1,093,000 barrels daily, compared with 1,001,000 barrels in the preceding week. For the four-week period ending November 4, crude oil production averaged 6,839,000 barrels daily, and crude runs to stills averaged 7,902,000 barrels daily with runs of foreign crude averaging 1,034,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Nov. 5 totaled 232,375,000 barrels, according to data reported by the Bureau of Mines, compared with the total of 232,375,000 barrels for the preceding week. This represents an increase of 1,566,000 barrels, comprising an increase of 619,000 barrels in stock of domestic crude and an increase of 947,000 barrels in stock of foreign crude.

OPD Reports From Europe

British Chemical Producers Worrying

—Continued from page 7

first and predicting that this trend will continue.

They see enough momentum in the Common Market economy to keep it moving at a high level through the first half of 1961, but their crystal balls are very hazy about the period after that.

Recent application by British Celanese and Hedon Chemicals (jointly owned by Distillers Corporation, Ltd., and Shawinigan Products Corporation) to the UK Board of Trade for an anti-dumping duty to be applied to Italian and Swiss vinyl acetate highlights the kind of domestic and world trade problems the British industry fears will flow from world excess capacity in periods of recession.

The application points out that vinyl acetate from these countries is competitive with the British product even after paying 33⅓ percent duty. Producers in Italy are Montecatini and Edison and in Switzerland, Lonza.

According to figures before the Board of Trade, Italian vinyl acetate was priced at an average of about $272 a ton in July before duty, while Swiss imports have averaged between $282 and about $298 a ton before duty—with imports from Germany running from $280 to $314 a ton.

Board of Trade statistics show that a total of 5,197 tons of vinyl acetate were imported in the first eight months of this year against 3,951 tons in the like 1959 period.

UK consumption of vinyl acetate was 12,000 tons in 1958, and is now estimated to be running somewhere between 15,000 and 20,000 tons a year. Imports so far in 1960 have been running at an annual rate of 7,800 tons, against 5,375 tons for all of 1959.

The Export Picture

Finally, the growth of chemical exports is slowing and Britains are afraid American chemical companies are beginning to move in on the sterling commonwealth trade area they have traditionally considered their private preserve.

Exports in August were about $70 million, against $67.5 million in August of 1959. Eight-month chemical exports total nearly $590 million, against $535 million for the corresponding period of 1959. But the exports for the June-August period were up 6 percent over 1959 while the January-May period showed a 10 percent increase.

British companies have also been affected by the slowdown in the US economy, for exports to America were down 5.8 percent to about $20 million for the first eight months. Meanwhile, Britain increased its chemical imports from the US by 65.2 percent in the same period to $93 million.

Rosin Prices to Level Off

—Continued from page 5

and the highest in nine years, supplies are likely to be about 11 percent less than a year ago and the lowest since the 1947 crop year, because of greatly reduced carryin stocks last April 1.

"Disappearance, limited by reduced supplies, is likely to be about 9 percent less than a year ago. Under these conditions, carryout stocks next March 31 are expected to be at an all time low.

"Production of all types of rosin is expected to increase. Output of gum, steam distilled, and tall oil rosin probably will be about 10, 2 and 15 percent higher, respectively, than a year ago.

"The anticipated increase in gum rosin output for 1960 reverses a steady decline which began in 1950. A further increase in gum rosin output is likely in the 1961 crop year.

"Both domestic consumption and exports of rosin will be less than a year ago. The expected reduction in domestic requirements is based mainly on losses in end uses because of increased rosin cost.

"US rosin exports in the 1960 crop year, limited by reduced supplies, will be lower than a year ago.

"Although production abroad has been increasing, reduced stocks in producing countries and increasing foreign consumption have kept import requirements for US rosin at a high level.

"In general, rosin consumption abroad has been increasing more rapidly than in the US.

Turpentine Output to Drop

"In contrast to rosin, production of all types of turpentine in the 1960 crop year is likely to be at last 5 percent lower than 1959, and may be the lowest since 1953.

"Increased output of gum turpentine will be more than offset by reduced production of sulfate and steam distilled wood turpentine.

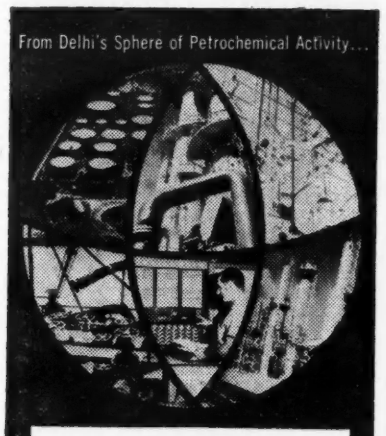
"Sulfate turpentine output should be significantly lower partly because some producers are using turpetine for fuel due to limited storage space and reduced domestic industrial requirements.

"Despite reduced turpentine production, overall supplies, boosted by the largest carryin stocks since April 1, 1954, may be the largest since the 1956 crop year.

"Another increase in stocks is expected next March 31. The increase will be mainly in gum turpentine output (about 35,000 barrels) to the 1960 loan.

"A slight decline is anticipated in disappearance of all types of turpentine during 1960 crop year. Slightly higher exports will partially offest lower domestic consumption.

"Disappearance of gum turpentine is expected to be down from 1959 levels while domestic and export requirements for steam distilled wood turpentine are expected to increase."



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API Gravity	31.1
Weight, Lbs/Gal	7.246
Color	30+ Saybolt
Acid Wash Color	Less than No. 1 Standard
Acidity	No free acid
Sulfur Compounds	No H_2S or SO_2 or Thiophene
K. B. No. (Toluene-105)	101
Distillation	
First Drop	138.0°C 280°F
Dry Point	141.0°C 286°F
Flash TCC	82°F

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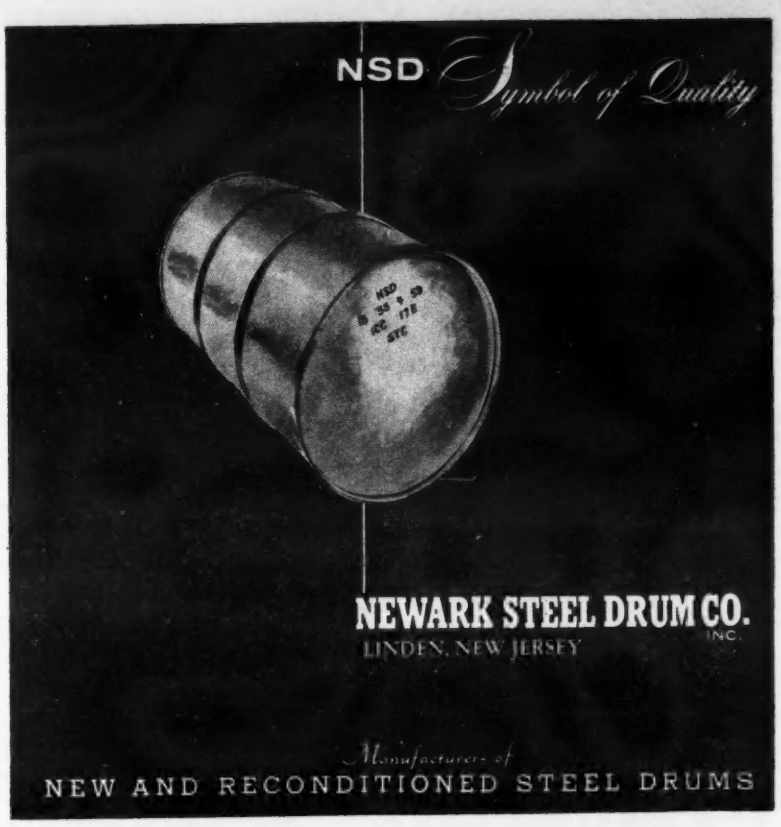

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Aliphatic Organics

Trade sources last week appeared more pessimistic than at any time since recession-ridden 1958. This was understandable since a cloud of gloom engulfs practically all of business. In the past several days, commmentators on the economic scene have not only discovered that there is, in fact, a recession, but in addition have traced its beginning back to last April and seen its end sometime in the latter part of 1961. Prior to the elections, respected economists talked about a rolling readjustment but apparently this so-called readjustment has rolled fast and too far.

Spokesmen for organic chemicals producers have maintained right along this fall that sales have been satisfactory. They still feel that sales all-told will top those of '59. However, the current picture and one they fear might remain static for the next several months, or as long as gloom prevails, is none too rosy. They describe business as soft, off from normal, below expectations, and as sluffing-off. As one will note immediately, efforts are being made to avoid the word "recession." In fact, finding a stingless substitute seems to be one of the day's more pressing problems.

More than likely, a trend toward small inventories, quite prevalent throughout chemical consuming industries, has helped to stall business. To make matters worse, it will probably become increasingly more pronounced in the few remaining weeks of 1960. The intervening holidays will likely cutback production and manufacturers will undoubtedly want to show as much cash as possible on year-end statements, sources believe.

Butadiene—Reductions averaging 2c. a pound in the price of styrene-butadiene latex were posted November 14 by a major producer. New tankcar listings for styrene-butadiene latexes (solids) is 27½c. a pound.

A spokesman for the firm said the decrease reflects lower raw material costs as well as the company's desire to increase penetration of such markets as paint, paper, packaging and building products.

Recently reduced, butadiene is quoted today at 12¾c. a pound, tankcars, down from 14c. Blame competitive pressures for the drop.

Butenediol—Butenediol will be available early next year in tankcar quantities, at prices ranging from 73c. a pound for the technical grade to 90c. a pound for the purified grade.

A new catalytic reduction process has made it possible to manufacture this one-time laboratory curiosity on a commercial scale, a spokesman for the producer reports, noting additionally that a price tag of 50c. a pound on the technical grade is possible at a later date.

Butenediol is derived from butynediol, which is produced by condensing acetylene with formaldehyde under pressure at elevated temperatures. The chemical reacts both as a glycol and an unsaturated compound and is used primarily as a building block in organic synthesis.

Potential applications for various butenediol compounds: soil fumigants, acrylic polymers, flame-resistant resins, poultry-growth agents, and synthetic rubber.

Ethanolamines—Producers of ethanolamines and other chemicals which get into the manufacture of synthetic detergents can take heart from the continual increase in syndet sales, even if business on other fronts isn't up to par.

Syndet sales during the first nine months of '60 were up 4.5 percent from the comparable period in '59, to 2.5 billion pounds, while value, at $613.2 million, increased 4.6 percent. At the same time, soap sales slipped slightly from year-ago levels, indicating that syndets are continuing to gain a larger and larger edge on their old-timer competitors.

Making the most spectacular gain, sales of liquid detergents were up 14.8 percent in volume, at 485 million pounds, and 9.4 percent in value at $166.6 million.

Sales of solid synthetic detergents in the nine-month period totaled 2.05 billion pounds and $446.6 million, a 2.3 percent increase in volume and a 3 percent increase in value.

Ethyl Alcohol—September imports of ethyl alcohol totaled 1,005,338 gallons, and were valued at $208,454 and dutied at $9,864. All of this material, originating in Peru, flowed into Galveston, Tex.

September's shipment brought imports for the first nine months of the year to 16,093,221 gallons, and increased chances that the 1960 total will hit 20 million gallons.

While the continual influx of foreign material supports random reports that alcohol is rather short domestically, some usually well-informed trade people stoutly maintain that supplies are sufficient to meet all commitments. There is also disagreement on prices, which some sources see advancing January 1.

Furfural—The Census bureau reports September imports of furfural at 3,573,212 pounds, valued at $389,837. The shipper, as always, was the Dominican Republic.

Imports are likely to be reduced substantially by the end of 1961. At that time, a major producer will halt output of adiponitrile at its Niagara Falls, N.Y., works, thus eliminating the need for furfural which is the starting material in its adipo manufacturing process there. The firm's contemplated switchover, a complete one, to the butadiene-ADN route to nylon will also effect sales of domestically produced furfural, it's thought.

In the interim, furfural suppliers will undoubtedly seek new markets. A step in that direction was taken late last August when the tankcar price was reduced ½c. a pound, to 11½c. Eastern delivery.

Molasses — Markets for blackstrap molasses were firm in most sections of the country along with slight advances noted at Gulf and Midwest points during the week ended November 16. Trading was reported considerably above the previous week in some areas but moderate in others. New business, Agricultural Marketing Service reported, was slow as most deliveries were being made on previous contracts.

Prices at New Orleans continued at mostly 12.5c., a gallon, although a ¼c. rise from the bottom of the preceding week's price range was noted. Prices at Mobile were up ½c. a gallon and Chicago showed an advance of 3/10c. to 4/10c. a gallon. New York listing remained at 13½c. to 14c. a gallon, the higher level posted a week earlier.

Hawaiian cane blackstrap production in

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 20, 1959
130.70	130.70	130.68	132.95

For Current Prices see page 9

Aliphatics Foreign Trade: September

Imports of selected industrial aliphatic organics for the months of August and September, 1960, as reported by the Bureau of Census, were as follows:

		September	*August*
Acetic acid (over 65 percent)	lbs.	70,640	109,800
Acetic anhydride	lbs.	151,570	13,300
Amyl alcohol and fusel oil	lbs.	34,959	71,538
Carbon tetrachloride	lbs.	426,446	425,058
Chloroacetic acid (mono and tri)	lbs.	1,623,449	844,471
Ethyl alcohol	gals.	1,005,338	1,319,430
Formic acid	lbs.	143,841	120,705
Furfural	lbs.	3,573,212	3,388,310
Glycerine, crude	lbs.	1,978,272	2,923,267
Lactic acid (55 percent or more by weight)	lbs.	54,030	8,355
Perchloroethylene	lbs.	641,229	2,313,860
Tetrachloroethane	lbs.	0	0
Trichloroethylene	lbs.	2,764,176	3,063,718
Vinyl acetate unpolymerized	lbs.	3,469,243	4,041,682

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Aliphatic Organics

October was 4,172,742 gallons, compared with 4,420,692 in the same month in 1959. Cumulative output for the first ten months of '60 was 48,052,197 gallons, substantially below the 54,210,249 gallons turned out in the like period a year ago.

Shipments of Hawaiian cane blackstrap to the US mainland in October amounted to 3,117,843 gallons, as against 3,859,641 in October 1959. For the first ten months of the year, shipments totaled 38,239,003 gallons, down from 49,736,763 a year earlier.

Perchloroethylene — Imports of perchloroethylene dropped from 2,313,860 pounds in August to 641,229 pounds in September. Valued at $46,881 and dutied at $2,813, this material arrived here from: France 430,877 pounds, valued at $32,051 and dutied at $1,923; Japan 210,000 pounds, valued at $14,530 and dutied at $872; and the United Kingdom 352 pounds, valued at $300 and dutied at $18. Off the roster for the first time in several months: Belgium.

Trichloroethylene — Imports of trichloroethylene in September were 2,764,176 pounds, valued at $205,431 and dutied at $15,404, according to statistics recently issued by the Foreign Trade & Economics Operations Division of the Bureau of Census, US Department of Commerce.

After hitting a record high, at 8,158,258 pounds, in June, trichlor imports dropped to 2,668,271 pounds in July, remaining relatively low in August (3,063,718).

Inshipments in September came from: France 784,149 pounds, valued at $66,249 and dutied at $4,969; Belgium 622,614 pounds, valued at $42,362 and dutied at $3,177; United Kingdom 484,912 pounds, valued at $32,352 and dutied at $2,426; Netherlands 280,506 pounds, valued at $19,809 and dutied at $1,485.

Also, Italy 240,876 pounds, valued at $18,654 and dutied at $1,398; West Germany 196,679 pounds, valued at $15,282 and dutied at $1,146; and Japan 154,440 pounds, valued at $10,723 and dutied at $804.

Trichloroethylene is used chiefly for removing grease from metal parts; dry cleaning of clothes; extractions of oils and fats; dehydration of alcohol; and petrol denaturing. Metal degreasing is far and away the biggest application, however.

A potential market for US-manufactured carbon tetrachloride, perchloroethylene and trichloroethylene exists in Norway, according to the US Department of Commerce. Contact same for further information.

Vinyl Acetate—Imports of vinyl acetate monomer fell from 4,041,682 pounds in August to 3,469,243 in September. The drop-off probably had no connection with the lower price (down 1.9c.) posted by domestic producers late last summer.

September shipments carried a total value of $591,051 and a duty of $80,298. Shipping here were: Canada 3,386,720 pounds, valued at $551,167 and dutied at $76,774; Japan 71,500 pounds, valued at $36,709 and dutied at $3,188; and West Germany 11,023 pounds, valued at $3,175 and dutied at $336.

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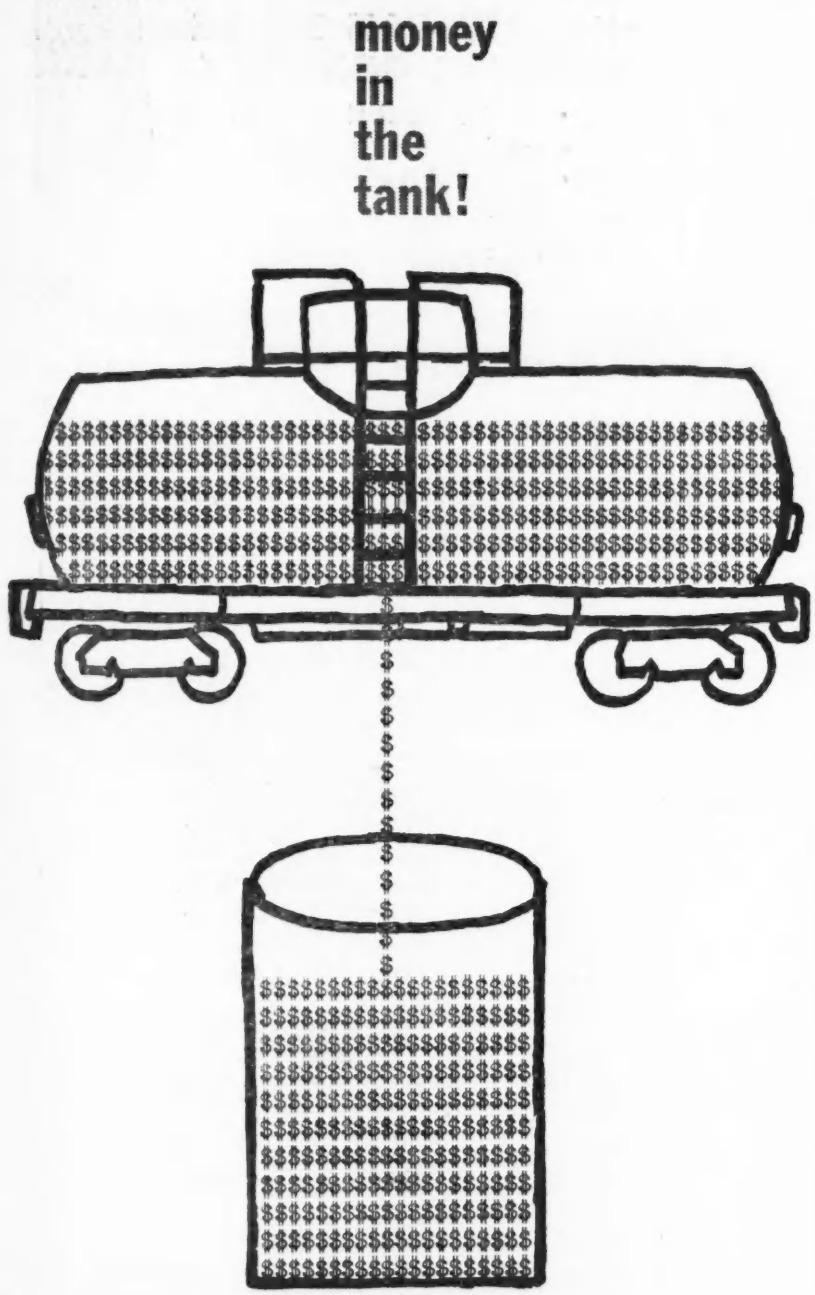

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Coal Chemicals

The price of 2° pyridine was increased 6 cents a pound across the board for spot sales by a major producer last week. Effective last Thursday the schedule became: tanks—71 cents a pound, drums in carlot quantities—75½ cents a pound and in less than carlot quantities—76 cents a pound. Other producers contacted at week's end declared that in all probability they would adjust their schedules to the higher prices. In commenting on the development trade sources emphasized the tight supply of pyridine in the domestic and world markets. One spokesman said that his office regularly receives inquiries for pyridine from all major industrial nations except the Soviet Union. Evidence that the Russians have some excess material is to be found in recent Census Bureau reports revealing Soviet pyridine, albeit in nominal quantity, arriving in the US to bolster domestic supply. Then, too, shortly before the price increase a British firm was known to be actively seeking pyridine at the old 65 cent a pound tankcar price. In the domestic area of the market one producer related that he found it necessary to allocate drum quantities to customers. All agree that pyridine is in tight supply and that with steel production rate still lagging little chance of improvement is foreseen.

A major oil company has announced a new price schedule for toluene of 25 cents a gallon, f.o.b., refineries and terminals, based on the following points: Chicago, St. Louis, Houston, New York Harbor and Fall River. Posting becomes effective January 1. Cancellation of the 25 cents delivered price is the first change in quotation since April, 1958. Cokeoven suppliers operating under a 15-day notification basis have until December 15 to decide upon posting a first of the year change. Sources have revealed, however, that a decision will be made early this week resulting most likely in adoption of the new f.o.b. terms.

With regard to improvement in cokeoven supply of short materials the outlook is none too good. At present there isn't the vaguest indication that any upturn in production rate is expected. The general feeling is that it will be second quarter '61 before any sustained drive can be mounted to bring steel rate up to more respectable levels—75 percent or so. In the meantime it's a case of *sauve qui peut*.

The American Iron and Steel Institute estimated steel production for the week ended November 20 would amount to 51.4 percent of theoretical capacity equivalent to 1,464,000 net tons of steel. Output in the previous week was 1,468,000 tons, 1,579,000 in the comparable week one month ago, and 2,233,000 tons during the corresponding week one year ago.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 20, 1959
117.64	117.64	118.29	118.45

For Current Prices see page 9

Basic Products

Benzene — Tight supply continues to keynote market reports for benzene. Nor is this tight supply limited to North American markets. European demand has far outstripped resources and has caused an increase in US shipments of benzene to Continental ports and conversely a decrease in volume of this vital chemical reaching US ports from Europe.

Although figures are available only through September the tally is 17.2 million gallons in exports as compared with 5.1 million gallons last year. Imports in the first nine months of 1960 were 25.5 million gallons as against 42.1 million gallons in the same period last year.

Major recipients of US exports were: Italy—4.5 million gallons; Canada—3.3 million gallons; Japan—2 million gallons; Brazil—1.9 million gallons, United Kingdom and Mexico—1.4 million gallons each.

Of nations shipping benzene to the US this year only three have volume enough to be listed by Tariff Commission. They are: USSR—20.4 million gallons, France—4 million gallons and Canada—.6 million gallons.

Despite tight benzene supply conditions in the domestic market trade opinion holds that there will be no price increase January 1.

Cokeoven suppliers are already struggling with a slow steel rate and intensive petroleum competition. Operating under such conditions it does not seem likely that cokeoven suppliers will further endanger their market potential by initiating a price hike.

Oil companies are faced with an entirely different possibility—the problem of overcapacity. Reliable sources claim that benzene capacity by the end of 1961 in production, building or on the drawing boards will approximate 720 million gallons or twice the present capacity. How much of this plant construction is firmly committed is unkonwn and it is for this reason that petroleum operators are not anxious to encourage expansion by making the price more attractive than 34c. a gallon.

Naphthalene — Unfortunately there's nothing new to report concerning availability of naphthalene. "Tight and growing tighter," one source replied last week in response to a question about supply. Concurring with trade opinion the spokesman said that "there's no hope for improvement until petroleum sources come on stream in '61."

Vital steps toward that end were made recently when one potential supplier awarded contracts for construction of a proposed naphthalene plant to be located at Delaware City, Del.

Total capacity of the four proposed plants: 325 million pounds.

Sites of the proposed petroleum naphthalene plants and capacities are:

Delaware City, Del.—100 million pounds.

Los Angeles—50 million pounds.

Above plants are a joint oil company-chemical firm venture.

Toledo, Ohio—100 million pounds.

Catlettsburg, Ky.—75 million pounds.

For comparison total naphthalene production for 1959 according to preliminary Tariff Commission figures was 408 million pounds.

Imports of naphthalene in September fell off sharply from August. Total for September—2,618,944 pounds valued at $196,048 as against 4,481,539 pounds in August.

Nation of origin, volume, value and Tariff Commission port of arrival designation follows:

United Kingdom — 1,404,699 pounds

Aromatics Foreign Trade: September

Following statistics are compiled from Census Bureau reports.

		September 1960	*September* 1959	*First Nine Months* 1960	*First Nine Months* 1959
EXPORTS					
Benzene	gals.	1,841,853	106,668	17,238,622	5,101,439
Coaltar, crude and refined	gals.	81,310	23,908	184,537	197,242
Creosote or dead oil	gals.	36,760	23,083	117,635	225,018
Cresols and cresylic acids	lbs.	2,735,518	405,091	11,643,719	5,850,609
Phenol	lbs.	3,684,591	4,925,639	35,278,906	30,904,835
Phthalic anhydride	lbs.	1,036,215	110,400	14,220,170	4,034,800
Toluene	gals.	2,128,148	3,270,676	39,755,921	20,904,390
IMPORTS					
Benzene	gals.	0	5,487,114	25,515,606	42,117,974
Creosote and dead oil	gals.	2,289,958	3,690,609	26,904,215	31,147,077
Cresols and cresylic acid, ADF	gals.	106,511	122,251	995,389	1,625,854
Naphthalene, melting point less than 79° C.	lbs.	2,618,944	4,910,159	30,325,049	48,545,432

Coal Chemicals

worth $75,527, with almost all material arriving in New York.

Belgium—601,626 pounds worth $53,998 arriving in New York.

Canada—269,000 pounds worth $17,978 arriving in Buffalo and Detroit.

West Germany—233,433 pounds worth $31,887 arriving in New York.

Netherlands—110,186 pounds worth $16,658 arriving in Philadelphia.

Phenol—Indications are that the split price schedule being maintained in sales to resin and non-resin customers will be revised to a single level January 1 equivalent to the price now being paid by non-resin users.

Contract has been let for construction of a phenol plant in Washington. As previously announced the plant will have a capacity of 36 million pounds per year. Construction is expected to being in January with completion slated for the fall of 1961.

Pyridine—Price increase of 6c. a pound across the board on spot sales was announced last week by a major producer. New schedule became effective last Thursday and is as follows:

Tanks, 71c. a pound, drums in carlot quantities 75½c. a pound and in less than carlot quantities, 76c. a pound. Other producers are of the opinion they will align their schedules to match the new, higher price quotations.

Imports of pyridine in September totaled 2,434 gallons worth $2,644.

USSR shipped 1,900 gallons into Philadelphia while United Kingdom sent 534 gallons into New York.

Toluene—A major oil firm last week announced a new price schedule for toluene of 25c. a gallon, f.o.b., refineries and terminals, based on the following points: Chicago, St. Louis, Houston, New York Harbor and Fall River. New terms are effective January 1. The old price of 25c. a gallon, delivered, had been in effect since April, 1958.

Intermediates

p-Nitroaniline—Increased competition—that's the promise held forth by the announcement of an oil company that it is entering the intermediates field by starting up a p-nitroaniline facility at Shreveport, La.

Although details are not fully available it is believed the plant will be on stream "shortly."

Previously quoted prices remain in effect: 44½c. a pound for material in drums in carlots or truckloads, 20,000 pounds minimum, delivered, and 46½c. in less carlot and truckload amounts, same basis.

Phthalic Anhydride—The only good news recently is the return to work a week ago Thursday of a Philadelphia plant hit by labor troubles last month. Supplier reports that material is moving again and commitments being met.

Otherwise the situation is still one of tight supply. Naphthalene has shown no improvement and consequently PA supply is still restricted.

Last available figures showed PA production this year barely ahead of last year's tally. Total through August this year—260.3 million pounds as compared with 252.7 million pounds in the same period last year.

Imports of phthalic anhydride in September registered 105,069 pounds valued at $19,046.

Canada shipped 50,000 pounds worth $8,500 to Buffalo and 22,000 pounds worth $4,263 to Chicago for a total of 72,000 pounds.

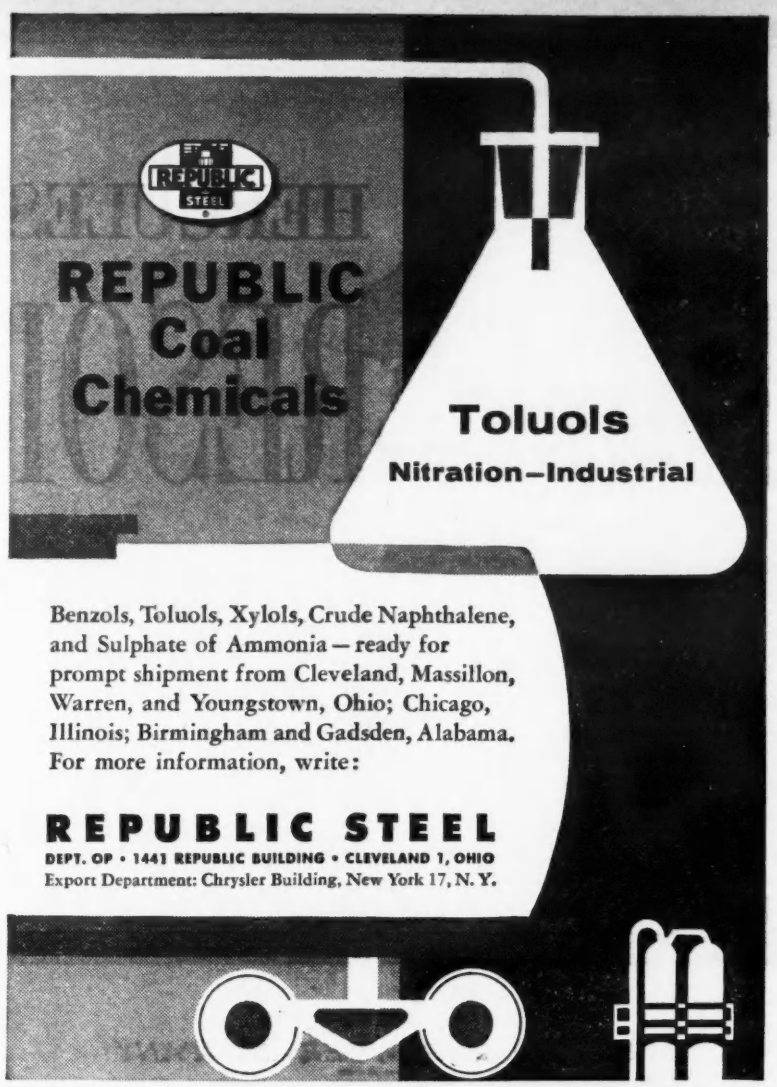
West Germany sent 33,069 pounds valued at $6,283 to Providence.

Tobias Acid—Price for this material continues unchanged from previous reports at 81c. a pound in drums, carlot or truckload quantities and 84c. a pound in lesser amounts.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended November 20,, were as follows:

Ammonia liquor	lbs.	463,470
Ammonium sulfate	lbs.	19,491,493
Benzene	gals.	1,877,629
Coaltar	gals.	10,273,588
Crude chemical oil	gals.	300,397
Solvent naphtha	gals.	60,079
Toluene	gals.	420,656
Xylene	gals.	120,059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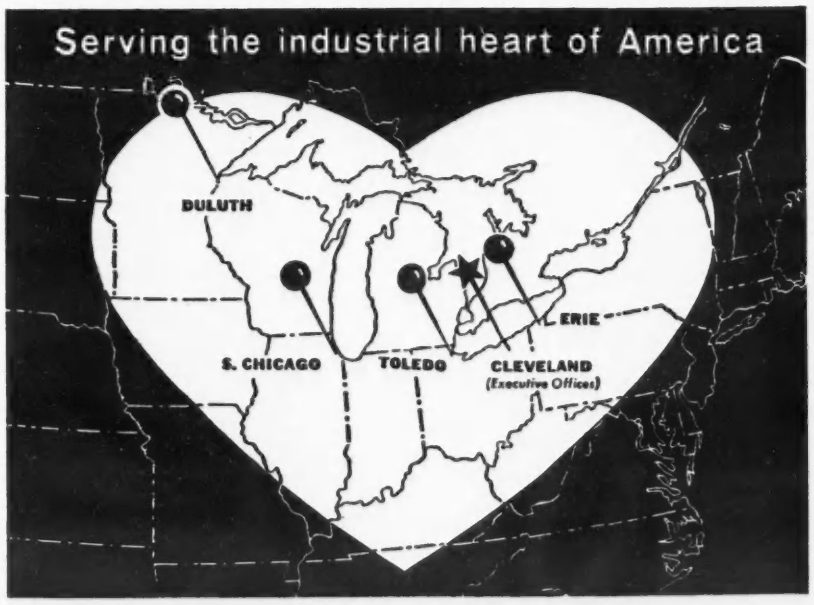

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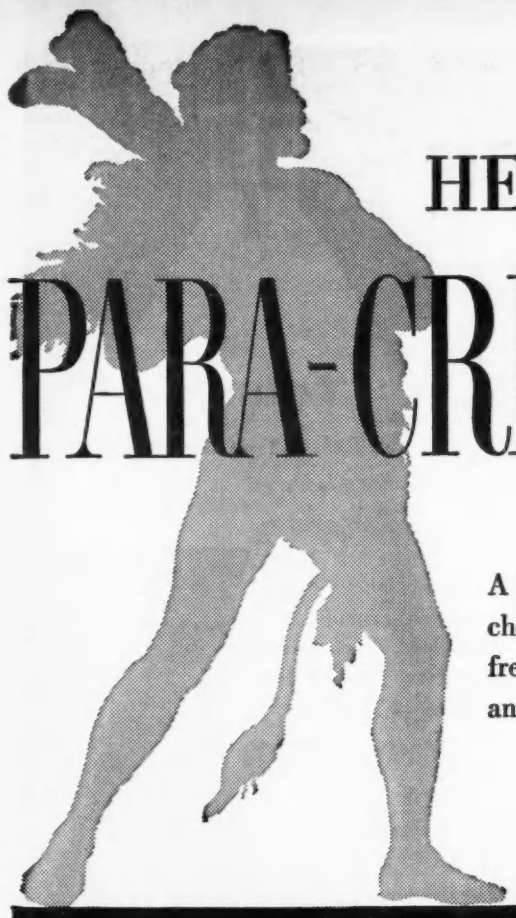

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Sherwin-Williams Building $1.5 Million Research Lab

Sherwin-Williams Company is under way on coverting a recently-acquired Chicago building into a new $1.5 million research center. The facility is expected to be in operation early next year, serving S-W plants both in the US and abroad.

Initially the center will house research and development laboratories devoted to solvent and emulsion coatings, mineral raw materials and biological and analytical research. Also on hand will be a number of technical service units.

Arthur B. Holton, technical director for Sherwin-Williams, has been named to supervise the new laboratory.

Herbicide Dow's Latest

—Continued from page 5

testing and two years of market studies, the herbicide is being introduced into fourteen north-central and northeastern states. These states comprise the so-called "bluegrass" area, where the crab grass problem is most serious.

The product is based on "Zytron," a new non-arsenical weed control compound discovered by Dow. It is said to show outstanding activity in selective control of crab grass on turf.

John H. Prine has been named to head a newly-formed lawn and garden production section of Dow's agricultural chemicals sales department, which will handle the product.

DuPont, Jap Concern

—Continued from page 5

formed by the duPont's international department to be concerned with the company's marketing and manufacturing activities in this area and the development of new business opportunities in the Far East.

Dr. Robert E. DeRight, director of the Latin American and Far Eastern Division, has been appointed director of the new division.

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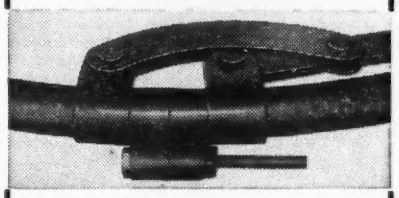

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Drugs, Fine Chemicals

Drug and fine chemicals makers contacted by OPD last week spotted a trend and a problem. The trend was to progressively smaller inventories on the part of their customers, the problem, not uniquely their own, getting out a surprising number of rush orders. A telephone order today for delivery by AIR freight tomorrow is not uncommon, spokesman for a leading producer of vitamins said, even among our customers who almost always give us at least 30 days, and more often sixty days lead-time.

It's pretty generally agreed that the trend and the problem relate to the feeling of insecurity that afflicts many segments of business. All the recession talk, sources feel, has made P.A.'s especially cautious and, fearful of being caught with their inventories up should a real slump set in, they're resorting to hand-to-mouth buying and paying additional freight costs as a result.

No one sees any change in the situation until, as one trade member put it, the mental attitude of the nation improves. If recessions are psychological, he says, then it's about time we reversed the current downtrend by talking and planning confidently.

Your future is great in a growing America was the slogan in '58 but the only trouble now is that some quite intelligent people feel that the growth rate is going to get progressively smaller, and that business is going to have to move into world markets, even as it has been doing, but more competitively and with greater speed, to fan industry's fires.

US Department of Commerce, eager to spur exports, says potential markets for drugs and fine chemicals exist in these countries: Angola, British Honduras, El Salvador, West Germany, Haiti, Iceland, India, Israel, Japan, Jordan, Libya, Malaya, Netherlands, United Arab Republic-Egypt, United Arab Republic-Syria, and Viet-Nam.

Inquiries about these markets may be addressed to any of the department's field offices or the Bureau of Foreign Commerce, Washington, D.C. All useful information on these and other markets of specific interest to the inquirer will be provided. (Foreign Commerce Weekly, 11/14/60.)

Ascorbic Acid—The 55c. a kilo reduction in vitamin C prices, posted November 7, puzzled some market observers. Thinking had been that the market was relatively stable at the $7.35 a kilo schedule established last April, following a series of price cuts.

It appears now, however, that prices on imported mterial have gone lower in recent weeks, forcing domestic makers of the vitamin to either cut prices similarly or lose some business. The first alternative, as is evident from the beating vitamin prices, generally, have taken in the past year, is preferable, of course, and the profit lost is just profit lost.

US exports of ascorbic have been well maintained, reaching 87,502 pounds in September. Imports, on the other hand, were about half as large in September as August, amounting to only 17,857 pounds. This material, valued at $62,693 and dutied at $6,581, arrived here from Japan (11,243 pounds, valued at $45,221 and dutied at $4,747) and Denmark (6,614 pounds, valued at $17,472 and dutied at $1,834).

Prices for sodium ascorbate, also reduced November 7, are: $6.80 a kilo for 100 kilos or more; $7.05 a kilo for lesser quantities.

Camphor—Imports of refined camphor rose to 19,200 pounds in September from a mere 400 pounds the preceding month, while imports of synthetic camphor fell to 22,646 pounds from 84,200. The seasonal factor probably explains the drop-off; in future months, however, the lower prices on domestically-manufactured synthetic camphor, posted in mid-October, may prove a check-rein on imports. If not, there's good reason to suspect that prices on the US product will be reduced further.

Shippers of refined camphor to the US in September were Japan (16,900 pounds, valued at $7,097 and dutied at $507) and Taiwan (2,300 pounds, valued at $1,345 and dutied at $69).

The synthetic camphor came from the United Kingdom (19,946 pounds, valued at $9,076 and dutied at $1,132) and West Germany (2,700 pounds, valued at $1,080 and dutied at $135).

Erythorbic Acid—A new and lower schedule was posed November 7. It reads: 200 pounds or more, $3 a pound; 50 pounds, $3.11 a pound; and 25 pounds, $3.26 a pound.

Also reduced, sodium erythorbate is now quoted at $2.44 a pound for 200 pounds or more; at $2.53 a pound for 50 pounds; and at $2.68 a pound for 25 pounds.

Iodine—Higher prices on domestic crude iodine, which went into effect late in August, may explain the substantial rise in Japanese imports in September.

Census bureau statistics show total imports at 223,062 pounds, valued at $169,261, with Japan's share 92,021 pounds valued at $78,171. Accounting for the remainder (131,041 pounds at $91,090) was the traditional foreign supplier of US iodine needs, Chile.

Of total imports in August of 216,324 pounds, Japan supplied 51,526. In July, its shipment totaled a mere 11,023 pounds and in all of 1959, 223,037 pounds.

Some market observers feel that a continual rise in Jap imports could force US and Chilean suppliers, who are both quoting at $1.10 a pound, to drop prices competitively.

Sulfa Drugs—Totaling 58,545 pounds, sulfa drug exports in September were divided into three categories: sulfadiazine, 2,234 pounds at $3,652; sulfathiazole, 13,361 pounds at $41,843; and sulfonamide drugs not specifically classified, 42,950 pounds, valued at $278,693. All told, shipments were valued at $324,188.

Thiamine — Trade reports indicate there's been no change in market conditions. Prices, thus, are weak; competition keen; pressures from cheaper foreign material increasing.

September saw imports climb to 5,084 pounds, from 3,362 the preceding month.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 20, 1959
59.27	59.27*	59.78	60.23

* Revised.

For Current Prices see page 9

Drugs and Fine Chemical Imports: September

Imports of selected drugs and fine chemicals for the months of August and September, 1960, as reported by the Bureau of Census, were as follows:

		September	August
Ascorbic acid	lbs.	17,857	36,711
Caffeine	lbs.	42,223	114,661
Camphor, crude	lbs.	0	0
Refined	lbs.	19,200	400
Synthetic	lbs.	22,646	84,200
Iodine, crude	lbs.	223,062	216,324
Menthol:			
Natural	lbs.	59,971	103,387
Synthetic	lbs.	4,179	20,244
Pyridoxine	lbs.	220	132
Quinidine and salts	ozs.	76,328	117,097
Saccharin	lbs.	26,438	25,802
Sodium alginate	lbs.	30,700	11,920
Tartaric acid	lbs.	209,013	404,171
Thiamine	lbs.	5,084	3,362
Theobromine	lbs.	1,000	8,050
Vitamins and vitasterols, n.e.c.	lbs.	58,930	70,750

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Drugs, Fine Chemicals

About eighty percent of this material, which was valued at $39,949 and dutied at $4,194, came from Japan. The remainder (1,102 pounds, valued at $8,100 and dutied at $850) was shipped here from the Canal Zone.

Japan also shipped the 200 pounds of B_6 that were brought in during September. Census bureau calculated the value of this material at $9,520 and the duty at $1,000.

Imports of vitamins and vitasterols not specifically classified by Census totaled 58,930 pounds and were valued at $187,600 and dutied at $19,696. Quantitywise, West Germany was the biggest shipper (21,386 pounds). Valuewise, Italy took precedence ($49,871).

Vitamin B_{12}—US suppliers of B_{12} products are now quoting these prices: cyanocobalamin crystals, $45 a gram; cobalamin concentrates, $52 a gram; and trituration of cyanocobalamin $52. Previous listings, established September 19, were, respectively: $83, $85, and $95.

At current levels, domestic prices are thought to be on a par with those quoted by importers of the vitamin.

Botanicals

Arabic Gum—Compared with 1959, imports of arabic gum declined 31.1 percent in the first five months of 1960. There is a handy explanation for this, according to Business & Defense Services Administration which recently reviewed the situation.

BDSA says that imports of arabic—and those of other water soluble gums, as well—are received each month of the year in widely varying quantities. Thus, it regards the substantial decrease in January-May arrivals as a phase in the customary erratic pattern.

Imports of arabic in May were 1,950,000 pounds, valued at $360,000, bringing the cumulative total for the first five months of '60 to 6,325,000 pounds, valued at $1,181,000. This compared with 9,175,000 pounds, valued at $1,402,000, in the like period in 1959.

Although arabic is predominantly a Sudanese product, BDSA notes, 20,000 pounds were received in May of this year from Iran, which had shipped none in 1959.

Karaya—Karaya imports in May were 792,000 pounds, valued at $138,000, which upped the cumulative total for the first five months of '60 to 3,442,000 pounds, valused at $713,000. This represented a decline of 9.5 percent from the comparable period a year earlier.

A new source of karaya in May was Pakistan which shipped 229,000 pounds.

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Essential Oils, Aromatics

The general tone of the essential oils and aromatics is that of firmness. Caraway advanced 25 cents per pound, red thyme advanced 20 cents per pound and white thyme advanced 10 cents per pound. Florida orange declined 5 cents per pound. Otherwise, West Indian bay is said to be firm as are caraway, chenopodium, Formosan citronella and lemongrass. Grapefruit continues weaker.

Vanilla beans, while not actually witnessing any price reduction, are said to be relatively weak due to the anticipation of the arrival of the new crop material early next year. Prices of this new material are expected to be somewhat lower than current listings, dealers report.

From the Foreign Commerce Weekly comes the information that Austria's booming economy indicates that a market may exist for the following United States food products: Canned fruit juice, canned pineapple, frozen poultry, corn, and tobacco. In general, the extent to which the trade in these products can be expanded depends upon price and quality.

Prices for fresh citrus fruits in the United Kingdom have generally been lower during the summer than a year ago, according to the US Department of Commerce. It appears that this situation may apply to the fall and winter season also.

Import of United States grapefruit fell off because of the lowered prices. California lemon imports, however, largely on a consignment basis, increased in volume.

According to the Foreign Commerce Weekly, published by the United States Department of Commerce, the desirability of developing a grapefruit industry in Italy has been suggested by the Italian press.

There is reportedly a surplus of grapes. The reports indicate there has been an overproduction of grapes, reduced domestic consumption of wine, intensified competition of foreign wines abroad, and a failure on the part of the Italian winemakers to place on the market distinctive wines with established names.

In addition, there has been an increase in the growth of table grapes which are unsuited, because of their low sugar content, to the making of wines.

In these circumstances, the use of surplus grapes for the making of grapejuice is recommended, according to the Weekly.

A discussion of the problem was conducted at the Third Fruit Juice Convention at Bari last year which brought out the potential demand for increased quantities of grape juice, both in Italy and abroad, and affirmed the suitability of grapes of Puglia, where the surplus is at its worst, to the production of juice.

United States producers of juice-making equipment or firms interested in investing in this industry may get in touch with the United States Embassy in Rome.

Price Trends

Advanced

Caraway, 25c. per lb.
Thyme, red, 20c. per lb.
white, 10c. per lb.

Reduced

Orange, Florida, 5c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 20, 1959
145.39	145.34	144.94	146.43

For Current Prices see page 9

Essential Oils

Bay—West Indian material is said to be firming. As yet, however, the low of the range remains at its previous level, $2.50 per pound.

Puerto Rican, 50 to 55 percent material remains at $2.40 per pound and the 55 to 60 percent material remains at $2.55 per pound.

Caraway—The market continues to strengthen.

From its previous high, $3.50 per pound, the oil has advanced to $3.75 per pound.

Chenopodium — The market continues firm following last week's 60c. per pound advance.

In the summer, the market for chenopodium was quite weak and even though the crop was said to have been suffering with blight, reduced demand would keep the market from firming.

The reason demand is low is because piperazine salts are replacing chenopodium as an anthelmintic.

The plants grow wild in the eastern and southern parts of the United States. In Maryland it is cultivated.

The powerful, offensive odor is present in the glandular hairs of the seeds, stems and leaves. In the early days of its production, it was sold mainly in Baltimore and for this reason it was known as Baltimore oil.

The crop is generally harvested by hand. After being cut (with small axes or hoes) the plants are left in the fields to dry.

Depending on weather, this takes from a few days to a week.

One acre of chenopodium produces about three tons of dried plant material. When the material is fully dried, it is hauled to the distilleries.

The oil is a colorless yellowish liquid with a camphoraceous odor which many persons find unpleasant. The flavor of the oil is bitter and gives a burning sensation.

Citronella—Formosa material is said to be still firm.

Reports from source, however, are conflicting. It is impossible to find out whether stocks are large or small at source.

It is a fact, though, that October, November and December are months of the heaviest production and that if there is not much material available during these months, it is certain there won't be much available after the first of the year.

Grapefruit — The market for Florida material continues to weaken.

Dealers report that this is the height of the production season and that it is not yet known just how large a volume of oil will be produced.

Apparently a large crop is anticipated in view of the weakening market.

Lemon—Prices remain at their previous quoted levels: California USP material ranges between $1.25 and $1.50 per pound and Messina USP ranges between $3.25 and $4 per pound.

Prospects are that Austria's consumption and import of lemons and grapefruit will increase in 1960-61, says the Foreign Commerce Weekly. A fair share of the market for lemons will probably go to the United States.

Though they are more expensive, California lemons are given preference by those consumers who look for high-juice content.

According to the Weekly, a factor limiting the sale of California lemons is the heavy treatment of the fruit with diphenyl. It is reported that housewives who use lemon peel in cooking usually ask for the Italian lemons which do not have the odor of diphenyl and which have thicker skins.

Lemongrass — The market continues firm, according to reports from source.

The following information, about extraction of the oil from lemongrass, is part of a paper prepared by Mr. S. M. Zahed, joint secretary and member of the Utkal Pharmacists Association.

The oil is extracted from the steam distillation of the fresh, partly dried or crushed leaves.

Generally a yield of 2 percent of the leaf weight is obtained. High pressure, amounting to some 20 pounds per square inch, increases the yield of the oil, but reduces the citral content.

The extraction center should be situated near the place of cultivation or at a place from whence the raw material can be exported soon after it is extracted.

The oil industry and the cultivation of lemongrass are interdependable says Mr. Zahed. There can be a good industry if the raw material is plentiful; conversely, farmers will be eager to cultivate the plant material if there is a distillery close-by.

Orange—Dealers report the market for Florida material is weakening. From its previous low, 45c. per pound, the oil has

—Continued on page 58

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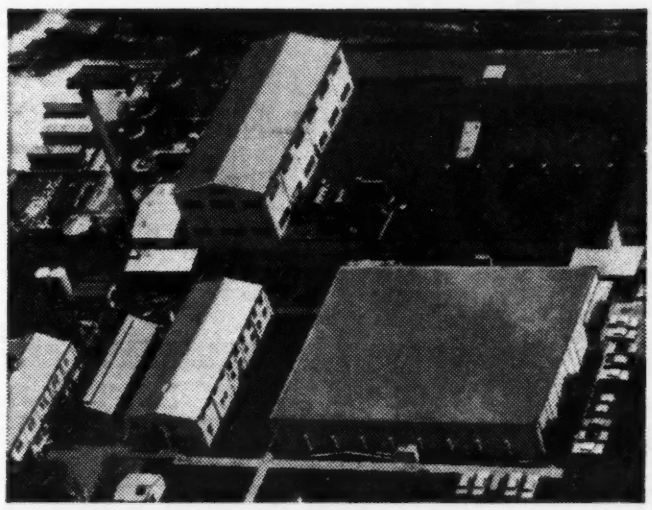
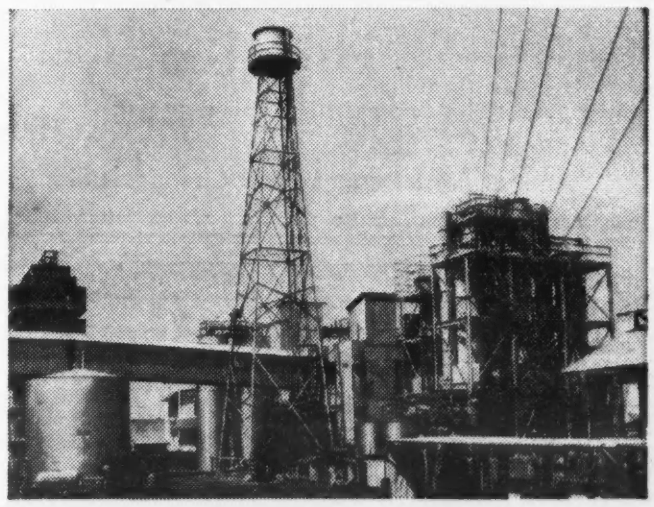


Florida SUN-FILLED citrus oils are produced at 3 Minute Maid plants — Plymouth (shown above), Auburndale and Leesburg, Florida.



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Essential Oils

—*Continued from page 56*

declined to 40c. per pound. Plentiful supply is said to be responsible for the price drop.

According to the Foreign Commerce Weekly, imports of summer oranges into France have been liberalized for the second consecutive year.

Last year the United States furnished 8,489 tons valued at $1.8 million. This year, reportedly, no more than 2,500 tons entered France, primarily as a result of price.

Imports of oranges and tangerines to Austria in 1960-61 are expected to be slightly less than those of 1959-60 when they amounted to an estimated 67,000 metric tons.

Sandalwood—An indirect report from Mysore reveals that the market continues to be firm.

Buyers from the Continent and from the United Kingdom are said to have taken quite a bit of material, and speculation is that the market will not weaken even after the auctions take place in December.

How source informants can predict this is unknown since the condition of the market is dependent upon the quantity and quality of material that goes to auction.

Around New York, a couple of dealers are offering material for slightly over $20 per pound, but the majority of them are asking around $25 with several houses completely out of stock.

Thyme — The market is generally stronger.

Red material advanced from its previous high $1.80 per pound to $2 per pound and white material advanced from its previous low, $2.10 per pound to $2.20 per pound.

Some dealers, however, are asking quite a bit more than these prices for their material. Prices of $3 and $3.25 were quoted for the red and the white, respectively.

Extremely dry weather in the producing areas is said to be responsible for the poor crop, hence the higher prices.

Aromatic Chemicals

Ethyl Vanillin — Announcement that a second company will soon start producing ethyl vanillin has had no effect on general market conditions for the synthetic vanilla flavor.

Prices remain at their previous level, $5.65 per pounnd for 500 pound lots and over, packed in 100 pound containers; $6.10 per pound for less than 500 pound lots.

Vanillin—Market conditions remain unchanged, according to industry spokesmen. Prices continue as previously quoted, $2.50 per pound for material in lots of 2,000 pounds or more, and $2.70 per pound for material in lots less than 2,000 pounds.

According to the Foreign Trade & Economics Operations Division of the Bureau of Census, United States Department of Commerce, imports of vanillin in September were 11,500 pounds, valued at $34,011 and dutied at $6,807.

All of this material was shipped in from Canada and, according to government sources, was for "immediate consumption."

Seeds and Spices

Nutmegs—The market for both East and West Indian material remained firm.

Paprika—The market was generally firm with a price advance noted in Roumanian material. From its previous high, 25c. per pound, it has advanced to 26c. per pound.

Pepper—The market for black pepper firmed while the market for white material was on the wane.

Malabar black advanced from 55c. per pound to 56c. per pound and Lampong black advanced from 55c. per pound to 56c. per pound.

Muntok white declined from 79c. per pound to 77c. per pound.

Dealers report that there is not very much material afloat that would arrive in time for November delivery. However, there is considerably quantity afloat for December delivery, which is said to be quite reasonable in price.

Vanilla Beans—Prices continue at their previously-quoted level: Bourbon material, $8.50 per pound, Mexican cut material $8.50 per pound and Mexican whole material $9 per pound.

Business is reported to be slow.

One explanation is this: The new crop material is expected on spot in some 3 months. Advance notices speculate that the prices will be several dollars per pound cheaper than current prices and users are apparently trying to get along with as little material as possible while prices are relatively high.

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Agricultural Chemicals

Both fertilizer producers and pesticide formulators report that business is currently at off-season levels. Trade sources look for some marginal improvement in fertilizer sales with the usual consumer rush to beat the scheduled price changes coming up at the end of the year. Also looking for better business in the last few months of 1960 are feed manufacturers. Mild weather over much of the country in the past few weeks is reported to be holding back formula feed sales. The outlook is for a general increase in the level of sales with the return of seasonally colder weather.

Imports of farm chemicals in September were almost uniformly higher than in the previous month. Gains were registered in imports of ammonium nitrate, up almost 10,000 tons over August but about the same as September of last year. Sodium nitrate imports were almost 37,000 tons greater than those made in August, but about 13,000 tons under the amount imported in September, 1959. Imports of urea however, scored gains in September when compared to figures for both August of this year and September. Last year, September's imports of urea were reported 8,004 tons, as compared to 4,810 tons in August and 3,737 tons in September of last year.

Herbicide sales increased 7 percent in 1960, over the level established in 1959. The increase in sales took place despite a slight decline in the number of farmers using herbicides, reports the Doane Agricultural Service.

Pre-emergence products showed an increase in sales of about 33 percent while post-emergence gained 11 percent. Off-setting these gains, were sizable drops in sales of chemicals to kill weeds and brush in pasture or non-crop areas.

In regard to use of herbicides in crops, applications on corn were reported to be greater while soybean applications were lower. Corn receives greater usage of herbicides than any other crop, and applications in 1959 were at 47 percent compared to 56 percent of the total in 1966.

Ammonia—The Census Bureau reports that the production of synthetic anhydrous ammonia during the month of September was 363,601 short tons. This represents a decline from the 380,339 short tons reported for the previous month, but is slightly above the 362,976 short tons. Stocks at the end of September totaled 115,713 short tons at producers plants, compared to the 127,703 short tons on hand at the beginning of the month.

Ammonium Nitrate—The output of fertilizer grade ammonium nitrate during September was 233,440 short tons, reports the Bureau of the Census. Production was placed at 215,881 short tons, while for the same month last year production held in the range of 223,451 short tons.

Stocks of fertilizer grade ammonium at producing plants were estimated at 128,603 short tons at the end of August as compared to the 121,715 short tons at the end of September.

Imports of ammonium nitrate (over 32 percent nitrogen) during September totaled 18,336 tons, and was valued by Customs at $1,017,478. Canada was the only shipper. Imports of ammonium nitrate (less than 32 percent nitrogen) totaled 5,759 tons. Originating countries were: Italy, 3,000 tons ($114,000); the Netherlands, 2,500 tons ($84,325); and Canada, 256 tons ($15,814). Customs total value was set at $214,136.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 20, 1959
103.15	103.14	103.16	103.03

For Current Prices see page **9**

Ammonium Sulfate—Synthetic (technical) output was placed at 70,961 short tons by the Census Bureau, a decline from the 96,472 short tons reported for the corresponding month a year ago, but above the 63,906 established for August of this year.

Stocks at the end of September were estimated at 100,759 short tons, at producer's plants, a reduction of about 2,000 tons in stocks from the beginning of the month.

Imports of ammonium sulfate in September totaled 17,042 tons and was valued at $584,838 by Customs. Leading shippers were: Canada, 10,428 tons ($359,367); Belgium, 5,512 tons ($187,391) and West Germany with 1,102 short tons ($38,080).

Animal Proteins—The market for fishmeal and scrap continues on the quiet side. Quotations hold at $92.50 to $95 per ton for menhaden meal, bagged on Gulf and Atlantic coasts. Fishscrap continues at the usual $4 per ton lower listings.

Imports of fishmeal and scrap during September were reported by Customs at 1,121 tons and were valued at $78,495. In August, inshipments of fishmeal and scrap totaled 2,183 short tons.

Customs reports the following shippers for September's imports: Canada, 40 tons ($3,429); Peru, 679 tons ($52,059) and Chile, 402 tons ($78,495).

Nitrogen Solutions—According to Census reports, the output of nitrogen solutions (including combination with urea) in September was 53,792 short tons, an increase over the 50,697 short tons reported for the previous month and almost 10,000 short tons below the output reached during September, 1959.

Stocks of nitrogen solutions during September went from 40,999 short tons to 50,976 short tons on hand at producer's plants at the end of the month.

Urea—Inshipments of urea during September totaled 8,004 short tons and was valued at $683,046 by Customs. Leading suppliers were: The Netherlands, 2,890 tons ($230,145); Canada, 1,343 tons ($123,383); West Germany, 1,132 ($104,863); Belgium, 1,200 tons ($104,336); United Kingdom, 748 tons ($66,632); Italy, 225 tons ($15,840); Japan, 206 tons ($16,353) and Switzerland with 160 tons valued at $15,522.

Farm Chemicals Imports: September

Following are data compiled by the Bureau of Census indicating volume of imports of agricultural chemicals for September and August, 1960. Figures for ammonium phosphates and fishmeal and scrap account only for that material intended for use as fertilizer. All figures are in short tons.

	August	September
Ammonium nitrate (over 32 percent N)	13,453	18,336
Ammonium nitrate mixtures (32 percent N or less)	84	5,759
Ammonium phosphate	8,599	9,355
Ammonium sulfate	11,690	17,042
Calcium Cyanamide	8,765	11,122
Castor bean pomace	2,148	3,302
Dried blood	222	427
Fishmeal and scrap	2,183	1,121
Guano	1,752	(1)
Nitrogen Solutions	4,092	6,734
Peatmoss (fert. grade)	22,770	20,255
Phosphates, crude[2]	16,622	18,756
Potassium chloride, crude	3,699	19,670
Potassium nitrate, crude	10	(1)
Potassium sulfate, crude	1,258	5,633
Sodium nitrate, crude and refined	16,912	53,628
Urea	4,810	8,004

(1) Figures not reported.
(2) Including [illegible] and phosphate rock.

Trade Name Chemicals

Dow Corning Corporation, a prime producer of silicone products, has taken another step toward moving silicone fluids and emulsions used as defoamers, out of the high-priced specialty chemical class. The Midland, Mich., firm, organized in the early forties by Dow Chemical Company and Corning Glass Company to manufacture silicone products, reduced prices of its silicone antifoamers by four to seven percent last week. D. M. Francisco, manager of defoamer sales, said the new price of Dow Corning **"Antifoam A"** is 28 percent lower than when the product was introduced in 1946 and pointed out that this price trend is typical of other forms of the company's silicone defoamers.

But other basic producers (General Electric Company and Union Carbide Corporation) take a different view. Spokesmen for GE's Silicone Products Division see the move strictly as a competitive one, feel it will not stimulate any significant amount of new interest. It's pointed out that reductions in the past have averaged about five percent and that five percent off a $6 item still leaves a product too expensive to tempt many new users.

GE Expanding At Waterford

GE, which expects startup of a plant for silicone fluids and derivatives in the first quarter of '61 and has underway a plant expansion in silicone intermediates, sees the silicone defoamer business as a highly specialized one.

The basic three do not expect further entries in the field of silicones in the near future. It's pointed out that manufacture is complex, involving not only know-how in production, but about customer requirements as well. (The specifications of a silicone defoamer used in the fermentation industry would not be the same as those for one used in stripping unreacted monomers in rubber latex manufacture or for use in the textile industry).

Monsanto Chemical Company, which licensed the Siemens-Westinghouse process for making high-purity silicon last year, says it has no intention of getting into silicone compounds.

(Dow Corning also completed licensing arrangements for the same process with Westinghouse Electric Corporation in May, 1959, to produce and sell high-purity silicon. This was the first diversificaton from the manufacture of silicones in the history of the company).

Formulators Are Specialists

In general, Dow Corning, Carbide and GE supply formulators who are specialists in their own right. For example, Hercules Powder Company markets a silicone-modified antifoamer, primarily for the paint industry to go along with its long time interest in naval stores and coatings materials.

Hodag Chemical Corporation, Chicago, Ill., buys silicones and formulates with other materials to make products used for foam control in sewage disposal, although the company is reported moving into the paper applications field also.

Chemicals and Dyestuff Division of Koppers Company markets **"Denuma"** an antifoamer originally designed for the textile trade to go along with its dyestuffs line. However, the company says the product has now moved into other areas as well.

Foaming Problems A Secret

Just as formulators may specialize, so the overall market is spread evenly over a dozen diffirent areas. It is difficult to pinpoint any one industry as being a major user of silicones for antifoam purposes. In addition, many consumers are not anxious to let it be known they have a foaming problem—in case the competition doesn't have one. Also, some hydrocarbons, with antifoam properties, do double-duty. Such a compound might serve as a paint thinner as well as an antifoamer.

Silicone defoamers, admittedly high priced on a per pound basis, are more realistically viewed on the basis of the job done. Little more than trace quantities are effective in breaking foams.

In such minute quantities, the danger of bringing a contaminant into the finished product is avoided. This is especially desired in such applications as paper coatings used for food wrapping and in breaking foam in deep tank fermentation operations where high protein content piles up heavy foam.

Though coverage in the Trade Name Chemicals market report encompasses many classes of chemicals, only a few of them are mentioned in this issue. Here is the entire list:

Accelerators	Feed Supplements
Adhesives	Filtering Materials
Antibacterials	Fungicides
Antifoamers	Ion Exchangers
Antioxidants	Processed Oils
Antistats	Surfactants
Blowing Agents	Suspending Agents
Catalysts	Synthetic Waxes
Chelating Agents	Textile Chemicals
Emulsions, Latexes	Thickening Agents
Enzymes	UV Absorbers
Fatty Acid Chemicals	

If you have suggestions for any additional materials that might be included in this section write OIL, PAINT AND DRUG REPORTER's Technical Editor, 30 Church street, New York 7.

But the high-priced, chemical specialty label has been a tough one for silicone-based defoamers to shake. By this we mean these products initial price (based on silicone content) will always be more than the commodity type defoamer. However, the amounts used (as little as 5 parts per million in some applications) make silicone defoamers more economical in the long run.

Textile Makers Hard To Sell

This viewpoint is hard to sell to a textile maker, for example, who may prefer to use a 50c. a pound commodity product even though he has to use 10 times as much. The argument here is that if the defoamer is spilled or too much is used inadvertently in the treating baths, the consumer will still come out ahead using the cheaper product.

Despite this type of objection, silicone defoamers have made good headway in the textile field where older materials, such as higher alcohols, are limited by the fact that they are slightly soluble in water. A shot of octyl alcohol will take care of foaming for awhile, but the treatment has to be repeated.

In the paper industry no large use has developed in manufacture of pulp because of the huge volumes of water used. In the first washers, kerosene is used extensively to control foam. However, in converting operations, in sheet-laying, the fine organics (polyglycol derivatives and vegetable oil-based defoamers) and silicone fluids are used. And in the making of paper coating compositions for food wrapping the trace quantity of silicone antifoamer used assures that the finished product will not be contaminated.

Other Uses For Defoamers

Other areas of use: deep tank fermentation processes where high protein content makes for heavy foaming; in rubber latex manufacture where stripping of unreacted monomers creates a foam problem; and in varnish cooking and in motor and lube oils and greases. Any material that tends to foam when packaged is a potential outlet for an antifoam agent.

Some observers estimate the potential for silicone antifoamers at about $2-$3 million. Of course, a wide variety of other materials, with varying degrees of efficiency, are used. Oleate types, glycol types and even oxide or pigment types are used to break foams. (The latter operate in more or less mechanical fashion to break foams).

The silicones are usually not used in solvents, but in 95 percent of aqueous systems which have foaming problems silicones can be effectively used.

Dow Corning's new prices on defoamers list **"Antifoam B"** at 55c. per pound in truckload lots, 57c. in less truckload, packed 45-gal. drums. In 5-gal. containers price ranges from 58c. to 62c. a pound as to quantity. Reduction is 4c. a pound.

"Antifoam A" and **"C-120"** are newly priced at $4.38 a pound in lots of 10 open head 440-lb. drums. Price is down 20c. a pound from previous listing.

"Antifoam A," "C" and **"AF"** emulsions are $1.67 a pound for 45 360-lb. drums or more and ranges to $1.73 a pound in single drum quantity. Price 10c. a pound less than previous quote.

Dow Corning notes other developing areas of application for silicone defoamers

—Continued on page **64**

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Coatings Materials

The market for coatings raw materials held fairly closely to the levels established over the past few months. Listings for the prime pigments and other paint materials were firm, with their supply/demand equation hedged by steel's meager output. Coatings' spot markets continued to find buyers at a premium. Casein importers reported that quotations for Argentine, Polish and French material are all in the range of 17¾ cents to 18 cents per pound. Supplies of casein are reported to be on the increase as consumers backed away from the market. Argentine, for example, is expected to have around 12,000 tons of casein on hand by the end of the year.

Polyvinyl chloride listings were officially reduced last week by several producers. According to trade sources, softening tendencies were in evidence in the past month particularly in the wire coating and calendering markets. The new price of 18½ cents per pound, for delivered carload quantities, went into effect on November 16.

Also coming in for price reductions were the PVC compounds. At least one producer has reduced the listings for compounds ¾ cent per pound across the board. Contacted by OPD last week, other producers who had not adopted the lower listing as of last week, were reported still considering the move. The feeling in the trade indicates that the new price would soon become market-wide.

Reductions averaging two cents per pound in the price of styrene butadiene latex were announced last week by one leading producer. The company states that the reductions apply across the board with the exception of some specialties.

According to a spokesman for the company, the decrease reflects lower raw material costs as well as the company's desire to increase its penetration into such markets as paint, paper, packaging and building products.

The previous tankcar price for styrene butadiene latexes (solids) was 29½ cents per pound.

Prices for retail paint are scheduled for price increases, according to reports from several leading paint manufacturers. The increases are said to be the result of mounting raw materials costs.

One company is scheduled to raise its prices an average of slightly less than three percent, which will go into effect on December 1. According to the company, the last price increase on paints took place in 1957.

Meanwhile, another company is reported to be set to raise its listings before the end of the month, while a third producer feels that it will probably adopt the higher listings shortly.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 20, 1959
111.26	11.26	111.26	110.95

For Current Prices see page 9

Prime Pigments

Aluminum Paste and Powders—Lower prices for aluminum sheeting, used in the manufacture of metal cans, announced last week by one leading producers did not affect the current listings for the paste and powders. Contacted by OPD last week, a spokesman for the company stated that the listings were due to the reductions being offered by competitive producers. In the past year, aluminum producers have been attempting to corner a portion of the metal can market, and are using the lower listings as well as the merits of the metal to draw additional customers.

Meanwhile the listings for the paste and powders remain unchanged, with trade sources reporting that little chance existed for a price change at this time. Demand for the paste and powders is currently at routine levels, although sales in the first ten months of the year will probably bring the total for 1960 above that of the previous year.

Carbon Black—Third quarter cosmetic shipments of carbon black decline ten percent from the second quarter to 313 million pounds. This is 15.5 percent below the corresponding period of 1959. Shipments totaled 441,739,000 pounds for the industry and is 13.2 percent below last year's third quarter. Production of the blacks hold at about the same levels, or 0.2 percent below 1959.

For the first nine months of 1960, production hit 1,465,572,000 pounds or 9.8 percent more than the output for the first nine months of last year. While production during the first three-quarters of this year were higher, shipments are reported to be off slightly. Latest figures show that shipments declined 0.7 percent during the January-September period.

Chrome Colors—The Census Bureau reports that the output of chrome oxide green (C.P.) in September was 590 short tons, as compared to the 501 short tons turned out in the previous month, during September of last year, the output of chrome green was placed at 420 short tons.

Stocks of chrome oxide green at the end of September was placed at 655 short tons, compared to the 534 short tons on hand at the beginning of the month.

Chrome yellow and orange production was reported at 1,736 short tons in September as against 1,724 short tons for the previous month. For September of last year, the output of chrome orange and yellow was reported at 2,268 short tons. Stocks of chrome orange and yellow were estimated at 2,685 at the beginning of September, versus 2,728 at the end of the month.

Titanium Dioxide—Output of pure and composite titanium dioxide in September was placed at 36,152 short tons, reports the Bureau of the Census. September's reported figure is above that for August (34,891 short tons) but below the figure for corresponding month last year when production hit 43,891 short tons.

Stocks of titanium dioxide at producing plants in September went from 70,005 short tons at the beginning of the month to 66,702 short tons at the end of the month.

Synthetic Resins

The following figures show production in pounds for August and list July figures for comparison, as reported by the Tariff Commission:

Production

	July*	August**
Phenolic and other tar acid resins:		
Molding resins	12,001,621	15,317,519
Laminating resins	4,334,612	6,036,711
Protective coating resins, modified, unmodified, except by rosin	1,871,596	2,026,902
Urea and melamine resins:		
Protective coating resins, straight modified	2,758,699	2,912,809
Styrene resins:		
Protective coating resins, straight modified	4,932,454	5,595,190
Vinyl resins:		
Total all types	83,925,698	94,675,348
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	20,195,157	20,820,229
Modified with tar acids, rosin and/or other material except styrene	5,576,398	6,070,571
Polybasic acid types except phthalic:		
Unmodified	419,543	632,263
Modified with tar acids, rosin and/or other material except styrene	573,772	835,754
Rosin modification for protective coatings:		
Rosin, rosin esters, unmodified (ester gums, esterified with glycerol)	705,865	1,031,422
Esterified with other alcohols, pentaerythritol, glycols, etc.	564,503	838,963
Modifications with phenolic and other tar acid resins	1,930,073	2,108,503
Modifications with maleic and fumaric acids	2,805,978	2,724,866
All other modifications	4,053,900	4,178,393
Coumarone-indene and petroleum polymer resins	17,239,089	21,216,721
Miscellaneous plastics and resin materials	21,221,475	24,911,519

* Revised.
** Partly estimated.

Lacquer Materials

Plasticizers—The tight situation in regard to the supplies of the phthalate esters continues unchanged. Trade sources report that allocations are holding at about the 50 percent mark for most of the larger producers. Some shifts in demand

have been noted in regard to the plasticizers as wire coating operations give way to increased demand for vinyl flooring materials. Producers report that vinyl flooring manufacture is currently taking a large portion of the phthalate ester production.

The sore spot in the phthalate ester supply picture continues to be the availability of naphthalene. With steel output down from normal operating levels, the supplies of naphthalene remains very sensitive. This situation is expected to last well into the first quarter of 1961, if not longer. Then petroleum sources of naphthalene should take up the slack in the supplies of this key raw material.

Miscellaneous

Casein—The market for Argentine casein held to the lower levels established over the past month. Listings remain unchanged. Last week, sources report that business was on the quiet side, activity being confined to an occasional lot here and there.

Listings for Argentine were last reported at about 17¾ to 18 cents per pound for shipment, with quotations for Polish holding in the same range. Polish casein quotations in the last two weeks have managed to pace those for Argentine, upsetting the trend established over the past year when Polish casein usually moved at listings about one-half cent per pound under Argentine.

Stocks of Argentine are reported to be building up, as sources report that November-December producion should be in the range of 8,000 tons. This is expected to bring the stocks on hand in the Argentine up to at least 12,000 tons.

French casein is reported to be making its bid again for some of the market. The French are said to be anxious to move some of their mounting stocks, and offers are reported to be in the range of 17¾ cents per pound, again for shipment.

Naval Stores

Pine Gum—The average commercial crude gum price for the week ended November 5, 1960 was reported at $44.80. The previous week saw $45.10 paid, while for the corresponding last year, the price paid per barrel was reported at $28.50. Loan price for the week ended Nov. 11 was reported at $23.78.

The volume of gum deliveries for the week ended Nov. 11 totaled 13,200, including 146 loan. For the previous week, deliveries were reported at 12,900, with no loans reported. A year ago, deliveries amounted to 11,400, with loans at 224.

The average barrel content was turpentine 9 gallons and rosin 298.1 pounds. Gum grading was: 11 WW, 9 Wg 39 N, 39M and 2 K and below.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Nov. 11	Mon. Nov. 14	Tues. Nov. 15	Wed. Nov. 16	Thurs. Nov. 17
Drums—					
N	...	$16.66‡	...	...	...
WG	...	16.71	...	...	...
WW	...	16.90	...	...	...
Bags—					
WW	...	17.30	...	...	...

Tankcars (for week ended Nov. 17)—
K or better, $15.50

Sales, USDA
... 5‡ ... ...

New York
(Per 100 lbs., c.l., Friday)
K-M, $17.75; N, $17.85; WG, $18.10; WW, $18.25

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	.46 3/10	...	...	.46½
Sales	...	12,000¶	...	...	6,000¶

‡ Carlots. ¶ Gallons. ‡ Export.

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Oils, Fats and Waxes

Trading in oils and fats last week was light and spotty, chiefly for prompt requirements. Edible oils were unsettled but rallied with soybean oil futures closing steadier. Cottonseed and soybean oils were irregular but closed firm and unchanged. Corn oil was easy and declined ¼ cent. Peanut oil was quiet and unchanged. Olive oil was quiet and unchanged on spot, while shipments from Spain were easy off 1 per 100 kilos for prompt and forward shipment, reflecting freer offers of new crop oil for December forward shipment.

Strong tone continued to feature the tallow and grease market. Offers were scanty and active trading took place at an advance of ¼ cent per pound in most grades. Continued active export demand for choice white raised prices ½ cent per pound.

Users of industrial oils continued to limit purchases to actual needs. Spotty demand was reported for castor oil. Brazilian oil was unchanged and shadable. Tung oil remained steady, with holders of light stocks maintaining the recent advance of ½ cent per pound. Crude menhaden oil was steadier owing to improved buying interest from consumers and exporters.

Oilmeals were inactive. Soybean meal continued weak and declined $1.50 per ton due to liberal stocks and slow business. Linseed meal was quiet and unchanged. Cottonseed meal also was lower, off $1.50 to $2 per ton.

The Tariff Commission on November 10 instituted an investigation for the purpose of determining whether import fees on peanut oil, flaxseed, linseed oil and combinations and mixtures in chief value of such oil should be terminated or modified. Import fee on peanut oil is 25 percent ad valorum on imports in any 12-month period beginning July 1 in excess of 80 million pounds; a fee of 50 percent ad valorum on flaxseed and on linseed oil and combination and mixtures thereof. A public hearing will be held in the Tariff's hearing room, Tariff Commission Building, Washington, D.C. on December 13 beginning 10 A.M.

Argentine's export retention tax has been reduced from 20 percent to 10 percent on linseed and tung oils under new regulations effective immediately according to reports from Buenos Aires last week, while the 20 percent tax will be cancelled on cake and meal and other products from crushing mills and rapeseed oil.

Price Trends

Advanced
Coconut oil, ¼c. per lb.
Copra, $2.50 per ton.
Cottonseed oil, refd., ¼c. per lb.
Greases, ¼c. per lb.
Choice white, ½c. per lb.
Tallow, inedible, ¼c. per lb.

Reduced
Cocoa butter, ½c. per lb.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed meal, $1.50 per ton.
Soybean meal, $1.50 per ton.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 20, 1959
105.39	106.33	107.44	122.53

For Current Prices see page 9

Vegetable Oils

Castor—Buying interest continued restricted to immediate needs. No. 1 Brazilian was quoted at 18½c. per pound, tankcars, New York, prompt delivery. Offers were quite liberal. Domestic grades was quiet and unchanged.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	600.000
Previous week	.....	1.430.000
Corresponding week, 1959	.....	2.822.000
Total this year	3.353.450	79.560.000
Corresponding period, 1959	24.349.000	86.520.000

Coconut — Crude was firmer at 12⅞c. per pound, tankcars, f.o.b. Pacific coast for immediate delivery and 12¾c., November-December. The New York market was quiet but steady at 14¼c. to 14⅜c., tankcars, prompt delivery.

Corn—Market was easy with competing oils and off ¼c. Crude was sold at 14c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined salad was lower at 17¼c., tankcars, New York basis.

Cottonseed — Futures were easy and lower early last week under liquidation but rallied with soybean oil futures, closing higher for nearby delivery. Trading was active. Cash oil demand was restricted to immediate needs.

Refined oil was higher because of the increased differential between crude and refined oil. Salad oil held at 13⅝c. per pound, tankcars, New York, prompt delivery.

Crude was steadier and unchanged. Prices ranged from 10¼c. to 10½c. per pound in the southeast, as to location, .10-.10⅛ Valley; 9¾c., Lubbock and 10c., Waco.

Linseed—Trading for spot delivery continued quite active because of the completion of contracts. Interest in futures lagged. Raw oil was unchanged at 12.30c. per pound, tankcars, Minneapolis, November-February; 12.50c., March-May, same basis and 13.41c., f.o.b. New York.

Olive—Shipments from Spain were easier because of slow trading. Prompt shipment was weak ranging from $49.50 to $50.50 per 100 kilos, drums, f.o.b. ports as to quality. New crop oil also was lower and available at $1 less for December-January shipment. Oil on spot was unchanged with light sales $2.25 per gallon, drums, exdock duty paid and 5c. per gallon more, exwarehouse.

Palm — This market continued quiet. Drums were unchanged at 14c. to 15c. per pound, spot according to quantity. Tankcars were offered at 11¼c., same basis.

Peanut—Crude was in light demand with sales at 14c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was unchanged at 17¼c., tankcars, New York basis.

Rapeseed—Demand was spotty. Tankcars were well held at 13¼c. per pound, tankcars, New York, prompt delivery. Drums were unchanged at 15¼c. to 15½c., spot, as to quantity.

Soybean—Crude was irregular, but closed firmer, regaining early fractional loss. Tankcars were held at 10¼c. per pound, Decatur, unrestricted, November delivery. Refined salad ranged from 12.30c. to 12.35c. per pound, tankcars, New York, prompt delivery.

Tall—Tight supply situation in crude oil continued to feature this market. Prices were stronger ranging from 2⅞c. to 3⅛c. per pound, tankcars, f.o.b. works, depending upon seller, buyer and quantity. Consumer interest was active, with sales reported at this price range. Refined grades also were steady at the recent advance of ½c. per pound.

Tung—Market remained firm. Trading was spotty chiefly for actual needs. Offerings were maintained from 22¼c. to 22½c. per pound, tankcars, New York for prompt delivery, depending upon seller. Drums ranged from 24¼c. to 24¾c. per pound, spot, depending upon quantity.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, November 18, follow:

	Sales	High	Low	Close
		Cents per Pound		
Dec.	282	12.17	11.76	12.12S
March	652	12.26	11.85	12.17S
May	460	12.35	12.00	12.25@12.29
July	189	12.44	12.10	12.31S
Sept.	3	12.19	11.98	12.15@12.20
Oct., '61	24	12.18	11.98	12.14S

Total sales and switches, 1,610 contracts.

Miscellaneous

Copra—Promot shipment was firmer and raised to $175 per ton, c.i.f. Pacific coast, following trading at $170, same basis.

Cocoa Butter—Trading was confined to actual needs. Spot stocks ranged from 64½c. to 69½c. per pound, according to quantity.

Flaxseed—Small flurry of activity developed in this market ahead of 2c. decline. Bids were down to $2.75, spot and to-arrive, basis Minneapolis. Even at the lower level the limited offerings more than met the slow demand, several crush-

Oils, Fats and Waxes

ers announcing shutdown schedules of a week or two.

Flaxseed crushed in October totaled 4,572,554 bushels increasing the total for August through October to 4,572,554 bushels, according to the National Flaxseed Association.

Uruguay's 1960-61 flaxseed acreage is estimated unofficially at around 310,000 acres or one-fourth larger than the 242,500 acres in 1959-60, according to the Foreign Agricultural Service.

It is too early to forecast production as the crop will not be harvested for over 2 more months. However, yields are expected to be larger than last year when production totaled 1,979,000 bushels.

Fats and Greases

Greases—Firm tone prevailed because of active trading. Offerings continued scarce and advanced ¼c. per pound. Choice white was boosted ½c. to 8¾c. to 9c. per pound, tankcars, delivered and yellow grease, 5c. to 5⅛c. same basis. Recent heavy export business in choice white has materially reduced stocks and prices advanced about 1c. during the past two weeks.

Lard—Market was easy and slightly lower. New cash lard was nominal at 10.05c. per pound, drums, Chicago.

Tallow—Market continued firm and prices were up at least ¼c.. Trading was active. Offerings were scanty and closely held. Bleachable fancy was quoted at 6⅛c. per pound, delivered; prime, 5¾c. to 5⅞c. special, 5⅜c. to 5½c. and guaranteed fancy, 6⅝c., same basis. Export interest was reported better. Guaranteed fancy was held at 6½c. per pound, in bulk, f.o.b. and 1c. higher for drums, f.a.p.

Fish Oils

Cod—Steady tone prevailed in this market. Trading was quiet, but offers for shipment were light and closely held at 7¼c. per pound, bulk, f.o.b. Gloucester, Mass.

Menhaden—Market was steady due to increased inquiry for domestic and export delivery. Production for this season has ceased except off North Carolina. Crude was maintained at 6c. per pound, tankcars, f.o.b. works. Refined light pressed oil was unchanged at 10c. per pound, tankcars, New York basis.

Cake and Meal

Cottonseed Meal — Buying interest lagged and the market was weaker, declining $1.50 per ton. Domestic and export business continued quiet. Meal 41 percent was quoted at $55 per ton, sacked, Mississippi Valley; $58, Alabama and $60, South Carolina.

Linseed Meal—Demand was only fair in this market but shutdown of several plants kept prices firm. Purchases generally were confined to spot for nearby needs, limited December tonnage booked. Continued weakness in soybean meal was bearish factor. Feed business was spotty, averaging slightly better. Extracted meal, 34 percent, was quoted $52 a ton, November delivery and $53 December. Old process meal was steady at $58 for November and $58.50, December.

Soybean Meal—Weakness again prevailed in this market in continuation of gradual downtrend since early September. Interest lagged and supplies were pressing, while production continued at near peak levels. Unrestricted meal was $1.50 lower, other markets down $1 to $2, total decline of $12 since first week in September. Meal, 44 percent, was lower at $43 a

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Waxes, Vegetable

Consumer demand for carnauba wax was reported light, chiefly to actual needs. Despite spotty trading, prices for spot material were steady at unchanged quotations. No. 3 Ceara crude was offered at 68c. to 70c. per pound, depending upon quantity and Parnahyba 1c. to 2c. higher. Futures were quoted about 2c. below stocks on spot. No. 1 Ceara yellow was available at 98c. to $1 per pound, spot as to quantity and Parnahyba, 2c. more.

Trading in crude beswax was quiet but the market was firm because of strength of replacements from sources. Offers for shipment were scanty and firm at all primary sources. Refined beeswax continued unchanged and steady.

Moderate demand was noted for candelilla wax. Market was steady. Stocks were adequate to meet requirements. Crude was quoted at 55c. to 56c. per pound spot and refined, 60c. to 62c., as to quantity.

Tariff Code

—*Continued from page 5*

statutes, together with principles and customs practices applied after established judicial precedent, are consolidated into a set of general headnotes and rules of interpretation which appears at the beginning of the first schedule.

Chemicals and related products, which are identified under the existing 1930 statute as Schedule I items, become Schedule 4 items in the new version of the law. They are broken down into thirteen separate parts and a number of subparts.

They are arranged in tabular form and identified under a new five digit coding system with the applicable tariff duties shown in one column for imports from other than the Communist areas, and the rates that apply on imports from Russia et. al., shown in another column.

A Breakdown of 13 Parts

Part 1 of the chemical schedule is a listing of benzenoid chemicals and products, broken down into three subparts—(A) organic chemical crudes, (B) industrial organic chemicals and (C) finished organic chemical products.

Part 2 consists of chemical elements, inorganic and organic compounds, and mixtures, with these subparts—(A) chemical elements, (B) inorganic acids, (C) inorganic chemical compounds, (D) organic chemical compounds and (E) chemical mixtures.

Part 3 embraces drugs and related products, with three subparts—(A) natural drugs, crude or advanced (B) alkaloids, antibiotics, barbiturates, hormones, vitamins, and other drugs and related products and (C) other drugs.

Part 4 relates to synthetic resins and plastics materials and rubber. It has only two subparts—(A) synthetic resins and plastics materials and (B) rubber.

Part 5, covering flavoring extracts and essential oils, also divides up into but two subparts—(A) flavoring extracts, and fruit flavors, essences, esters, and oils and (B) essential oils.

Part 6 lists glue, gelatin, and related products with no subparts.

Part 7 is a listing of aromatic or odoriferous substance; perfumery, cosmetics, and toilet preparations. It has two subparts—(A) aromatic and odoriferous substances and (B) perfumery, cosmetics, and toilet preparations.

Part 8 relates to surface-active agents; soaps and synthetic detergents with subpart (A) surface-active agents, and subpart (B) soap and synthetic detergents.

Part 9 contains dyeing and tanning product; pigment and pigment-like materials; inks, paints and related products. It has three subparts—(A) dyeing and tanning products (B) pigments and pigment-like materials, and (C) inks, paints, and related products.

Part 10 lists petroleum, natural gas and products derived therefrom.

Part 11 contains fertilizers and fertilizer materials.

Part 12 deals with explosives.

Part 13 covers fatty substances, camphor, chars and carbons, isotopes, waxes, and other products in these three subparts—(A) fatty substances; (B) camphor, chars and carbons, isotopes, waxes, and other products; and (C) mizcellaneous medical supplies.

Products of interest to the chemical which are currently duty-free and are found in Schedule 16 of the present tariff law, are scattered among the eight schedules in the new document in accordance with the subject matter.

The reclassification of the tariff structure will require action by congress before it can become effective. A number of changes in the laws that are necessary are outlined in the report of the commission. For example:

The implementing legislation will need to adjust the fixed limits, embodied in the trade agreements act on the authority of the President to change rates of duty, and make certain other changes in this act, the commission points out.

Chemicals, Farms

—*Continued from page 7*

much as 20 percent from 1959 to the mid-1960's.

Lesser rises of 10 to 15 percent are in prospect for chemical fertilizers, machinery, and miscellaneous supplies and services, according to the Department of Agriculture agency.

Consumption of primary plant nutrients for the crop season of 1959-1960 was estimated by the agency at about 7.5 million tons—about one percent above that for the preceding year.

This record level of use is expected to be maintained or slightly exceeded in the year ending June 30, 1961. The trend toward higher analysis for both mixed fertilizer and straight materials was held likely to continue.

Consumption of insecticides and fungicides was reported about normal in 1960, despite the severe winter and late spring which delayed farm operations over wide areas. Exceptions were found in the south-central states and parts of the south Atlantic area where the volume used was well below that of a year ago. A decline in insect infestation on the Pacific Coast caused consumption in that area to fall slightly below normal levels.

"Although prices of pesticides may not have changed greatly," the agency noted, "growers often have higher costs per acre for pest control when they switch to newer, more efficient chemicals. For the higher cost, however, more pests are controlled and frequently the quantity and quality of crops produced are increased."

Trade Name Chemicals

—*Continued from page 59*

are in plastisols and in polyurethane foams. In plastisols, silicone compound use is, to a degree, as a defoaming agent. In polyurethanes, the silicone acts to control foam and contribute to uniform cellular formation.

The plastisols, suspensions of vinyl compounds in plasticizers, are widely used in the production of vinyl films, protective coatings, moldings seals and closures.

Small amounts of silicones added to these plastisols help bubbles escape more easily from the formulation (deaeration) and contribute to lubrication so that products have greater mar and scuff resistance.

The Silicones Division of Union Carbide Corporation announced new and lower prices for the company's **"Sag"** silicone defoamer compounds. New price for **"Sag 470,"** a 10 percent solution of silicone solids for use in aqueous systems is 55c. a pound in truckload or more of 55-gal. drums; 1- to 44-drum lots are 57c. per pound.

Other Carbide products: **"Sag 47,"** a 100 percent active material, priced at $4.50 per pound in single drum lots; **"Sag 471,"** 100 percent active fluid, also at $4.50 a pound packed in 5-gal. pails.

American Cyanamid Company reports four antifoam formulations in the company's **"Cyanotex"** line are currently being marketed.

"Cyanotex 992" is a silicone solution for textile application; **"H-208,"** a fatty emulsion for defoaming inorganic salt solutions; **"4007,"** an oil type paste emulsion used in emulsion paints and **"Cyanotex Antifoam Regular,"** an oil type fatty paste emulsion for general use where odor, color or flammability are not a consideration as in waste disposal, sewage treatment and ore processing.

EQUIPONOMICS

BIRD Continuous Centrifuges 18" x 28" 316 S.S. (1952) 15 H.P. Washing
OLIVER VACUUM FILTER—S.S. 316, 3'x6'
COLUMN S.S. 4' D x 65' high, 55 plates.
TANKS S.S. 304, 2500 gal. 7' x 8' new.
MIKROPULVERIZER—2TH—7½ H.P.
KNEADER MASTER — Paterson 2¼ gal. vac., jack., variable speed (Inf.)
HEAT EXCHANGERS S.S., 60 to 2300 sq. ft.
CENTRIFUGE—Tolhurst 40" rubber lined, centerslung, 5 H.P.
SPARKLER FILTER—Steel, Model 33-17.

PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N.J. Tel. FUlton 1-1183-4

STAINLESS

MIXERS—ALL TYPES

5164 H1—Patterson Kelley Twin Shell Blender in Stainless, 150 cu. ft.; 60" dia.; 10 HP Motor.

5387 F1—Patterson S/S Conaform Vacuum Blender; 13.7 cu. ft. Jacketed.

5070 F1-2—Stainless Lined Dbl. Sigma Arm 300 Gal. Vacuum Mixers; 56" x 50" x 44" with 60 HP Motors.

5070 F4—Stainless Steel Dbl. Arm Vacuum Mixer; 150 Gal. Cored Arms 44" x 44" x 36"; 40 HP Motor.

4702 B1—J. H. Day Cincinnatus S/S 300 Gal. Mixer; Double Arm, Jacketed.

5223 C3-4—Two Lehmann Amalgamators; S/S lined; 32" x 44" x 36".

REACTORS—VACUUM PANS

5048 D1-2-3—Three Struthers Wells 2000 Gal. Type 316 Stainless Reactors; Vertical, Jacketed, Agitated.

5243—Struthers Wells 400 Gal. Stainless Reactor, Jacketed and Agitated, 7½ HP Motor.

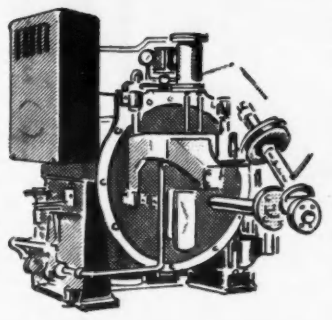
4627 H1—Mojonnier Stainless Vac. Pan 6' x 12'; accessories.

3799 V1—Lancaster Stainless Lined Rotary Reactor; Jacketed; 50" x 17'4"; 300 PSI Internal.

5020 S16—730 Gal. Stainless Lined Still with Condenser.

SAVE $12,000 on FIRST'S FEATURED SPECIAL

Sharples C 27 Super - D - Hydrator in Type 316 Stainless with 40 HP motor.



CENTRIFUGALS—CLARIFIERS—SEPARATORS

4926—Squier S/S 30" Suspended Centrifugal; Perf. Basket.

5190 D4—A.T.&M. 30" S/S 2 Speed Suspended Centrifuge.

4093 B11—A.T.&M. 40" Solid Bowl Suspended Centrifugal.

5230 L1—Western Model UD Type 316 S/S Vapor Tite; 36" x 20".

4750 V—A.T.&M. 60" Type 316 SS; Vac. & Pressure Hoods.

FMC Pays MORE For Your Surplus

F M C

EVAPORATORS—KETTLES—TANKS

5128 M2—Pfaudler Stainless 300 Gal. Evaporating Dish, Jacketed; 6' x 30".

5295—Buffalo Stainless Thermo Recompression Sanitary Evaporator with all accessories.

5311—Buflovak Stainless Double Effect Evaporator; Model 8½-60 D.

5123 C1-2—Two Horizontal Type "C" Versators; Type 316 Stainless; with 20 HP Motors.

4886 D36—Stainless 500 Gal. Vertical Jktd. Agitated Kettle.

4840 B36—Electrically Heated 800 Gal. Stainless Kettle; 5' x 5'.

4840 B37—1300 Gal. Vert. Stainless Kettle; 5' x 8'9".

4737 A15—800 Closed Stainless Tank; 51" x 118"; 24" Manhole.

DRYERS—ALL TYPES

5318 G2—Stainless Drum Dryer; 8'x11½" with Scraper.

5183—Buflovak Chrome Plated Dbl. Drum Dryer 6"x7-⅝".

5161 B7—Bowen Stainless Spray Dryer; 30" x 32".

4621 G1-3—Two Stainless Drying Drums; 48" x 56".

4690—Stainless Lined Rotary Counter Current Dryer; 50" x 20' with all accessories.

4819 M4—Louisville Stainless Rotary Dryer; 30" x 28'.

5161 B8-9—Two Stainless Concentrators; each has bank of 4 Rot. Vac. Continuous Jktd. Dryers 2' x 10'.

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Conical Dry Mixer 192 cu. ft. vol.; 125 cu. ft. opr. vol., with 15 H.P. Unibrake Motor.

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1—Ball & Jewell #2 Cutter.

4—Link-Belt Vibrating Screens 4' x 8'.

1—Jeffrey Vibrating Conveyor.

1—30" Sperry Filter closed del., 3-eye, 39-plates, 40-frames.

1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.

1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor, 3-drums balls. Like new.

1—Schutz-O'Neill Pulverizer 22", Style D.

1—Abbe Pebble Mill 5' x 22'.

1—Sparkler Filter 33-S-28, with Scavenger Plate, steam jacketed.

1—2 qt. Sigma Blade S.S. Mixer.

1—250 gal. Kettle, nickel jacket, 100#.

1—Bartlett Hog Mill with 7½ H.P. motor.

1—430 S.S. Tank 3000 gal. vert. ⅜ plate, with 2 pc. cover.

2—Vacuum Pumps, Gardner-Denver, 5" bore 4" stroke, with 7-½ H.P. motors.

1—#316 S.S. Reactor 265 gal. jkt.

2—Twin Screw Mixers 120 gal. jkt.

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Large stock of new and used H.P. Boilers, Tanks, Pumps, Heat Exchangers, Freon Compressors, Stainless Steel & Brass Valves. Advise us as to your requirements.

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750 gal. 316 Stainless Steel Still.

300 gal. 316 Stainless Steel Still.

Foster Wheeler Dowtherm Boiler 2.2MM /BTU/HR. 150 PSI, 650°F.

Stainless Vessels & Tanks

150 gal. Type 316 Stainless—150 PSI.

500 gal. Type 347 Stainless—125 PSI.

100 gal. Type 347 Stainless—94 PSI.

Type 316 Stainless Tanks 750 & 325 gal.

Stainless Heat Exchangers

68 sq. ft. 22—¾"x16' Stainless Tubes.

350 sq. ft. 114—¼"x16' Stainless Tubes.

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2320 sq. ft. 564—1"x16' Stainless Tubes.

Brown Fintube 8 Section Size 182020.

Stainless Valves, Pipe & Tubing.

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Screens 60"x84"; 40"x84"; 30"x96" S.S.

#5057 Raymond 5 Roll Hi-Side Mill.

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Rota Louvre Dryers 1106-36; 705-25; STAINLESS 604-24; 310-16; 207-10.

Traylor 8'x11' Ball Mill, Steel Lined.

Tolhurst 40' SS Centerslung Centrif.

Shriver 30"x30" Filters 36 P&F—1" cake.

Sweetland #7 & #12 Filters.

6'x29' Column 347 SS 20 tray.

Union 2¼"x4" Triplex Stainless 15 HP Pump.

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2—Bubble Cap Columns 30" Stainless Steel.

1—Hercules 16" x 16" Stainless Steel Filter w/24 plates & frames.

4—Hercules 8" x 8" Stainless Steel Filters w/12 plates & frames.

5—Shriver #1 and "OO" Diaphragm Pumps.

1—Stainless Steel 30 gal. Autoclave 1000 psi w/Jacket & agitator w/XP Motor.

1—Cyclotherm Package Boiler 250 psi, 600# hr.—20 HP.

4—Stainless Vacuum Receivers 50 to 300 gals.

8—Jack. Stainless Kettles 70 to 100 gals. and 200 gals. Closed.

1—Horiz. Spiral Mixer, 3' x 12', jacketed.

3—Spiral Blenders, 800 to 2000#.

1—Patterson 5' x 6' Jack. Ball Mill 25 HP.

1—Day 50 gal. S. S. Sigma Blade Mixer.

1—N. J. MX Pony Labeler.

1—Rotex 60" x 84"—S. S. Screen.

3—Screens 40" x 84" & 30" x 96".

1—Sturtevant 2" x 6" Open Door Lab. Crusher.

1—Raymond 30" Whizzer Separator.

1—Rotex Screen Double Deck 20" x 48".

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4—24" FILTER PRESSES—S.S. Fittings, Wood Frames.

1—VULCANIZER—5' x 9' 120 lbs. Pressure.

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Column: 24" x 22', 316 stain. steel.
Disintegrators: Rietz RD18-P and RD-12.
Mills: J. H. Day 16x40" high speed 3-roll.
Dryer: American 24x48" dbl. drum.
Dryer: Bowen lab. spray, st. st.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 24" rubber, 2-speed.
Filter: Sweetland #5 st. st. lined.
Filter: Eimco, drum 16" x 12".
Centrifugal: Tolhurst 48" st. steel.
Dryer: Proctor & Schwartz 6-tray st. st.
Mixers: Ross 150 gal. paste, 10 hp.
Centrifugal: AT&M 60" st. st. perf.

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SELECTED RECENT PURCHASES

2—MIKRO #3TH PULVERIZERS, STIRRUP HAMMERS.
1—J. H. DAY #8 CINC., 150 GAL. SIGMA MIXER.
1—AMERICAN 42" X 120" DBL. DRUM DRYER, STAINLESS TRIM.
2—BUFLOVAK VACUUM SHELF DRYERS: 110, 98 SQ. FT.
1—RAYMOND 50", 5-ROLLER HI-SIDE MILL.
3—KOMAREK-GREAVES 160,000 PSI BRIQUETTE PRESSES.
1—BOWEN LAB. SPRAY DRYER, T304 SS, CONE BOTTOM, GAS.

KETTLES — REACTORS

1—3500 GAL. STRUTHERS-WELLS, T316 SS JKT. REACTOR, AGIT.
1—1900 GAL. T316 SS JKT. REACTOR, 5 HP AGIT., VACUUM.
5—1350 GAL. T347 SS JKT. KETTLES, ANCHOR AGIT.
1—1000 gal. Dopp cast iron kettle, jkt., 25 HP agit.
1—750 gal. T304 SS jkt. fermenter, ASME, 10 HP agit.
1—750 gal. Pfaudler glass-lined jkt. reactor.
1—600 gal. Pfaudler glass-lined jkt. reactor.
1—600 gal. T304 SS jkt. crystallizing kettle, agit.
2—500 gal. Pfaudler glass-lined jkt. reactors, agit.
6—465 gal. T304L SS jkt. reactors, 175# WP.
2—125 gal. T316 SS jkt. fermenters.
2—100 GAL. T304 SS JKT. REACTORS, ASME, VAC., UNUSED.

STAINLESS STEEL TANKS

1—5700 gal. horiz., T304 SS, 6'4" x 24', UNUSED.
2—4500 gal. vert., T304 SS, 8' x 12', UNUSED.
1—4300 GAL. HORIZ., T304 SS, 6' x 20', DISHED HEADS.
1—3700 gal. vert., T304 SS, 6' x 17', VACUUM.
1—3400 gal. horiz., T304 SS, 6' x 16', dished heads.
1—3300 gal. vert., T304 SS, 6' x 14', dished heads.
1—3000 gal. vert., T304 SS, 6' x 15', coils, Vac.
3—2750 GAL. VERT., T304 SS, 7' x 8', DISHED HEADS.
1—2500 gal. vert., T316 SS, 7' x 7', dished heads, agit.
2—2300 gal. vert., T316 SS, 7' x 8', coils, agit.
4—2250 GAL. VERT., T316 SS, 7' x 6'3", DISHED HEADS.
1—2100 gal. vert., T316 SS, 6' x 9'10", cone bottom.
1—1750 gal. vert., T304 SS, 5' x 12', coils, Vac.
12—1750 gal. vert., T304 SS hoppers, 235 cu. ft.
1—1250 gal. vert., T304 SS, 5' x 12', coils, vac.
2—1000 GAL. VERT., T304 SS, 5'5" x 6'2", UNUSED.
6—685 gal. vert., T316 SS, 3' x 13', coils.

EVAPORATORS

1—MOJONNIER 2085 SQ. FT. TRIFLE EFFECT, T304 SS, WITH PREHEATERS, PUMPS, ETC.
1—BUFLOVAK 1025 SQ. FT. DBL. EFFECT, T304 SS, SIZE #8-50-D.
1—Buflovak 840 sq. ft. dbl. effect, T304 SS, size #7.5-42-D.
1—Buflovak 710 sq. ft., dbl. effect, T304 SS, size #7-35-D.
1—Buflovak 700 sq. ft. single effect, T304 SS, forced circ.
1—STRUTHERS-WELLS 630 SQ. FT. SINGLE EFFECT, T316 SS, CALANDRIA TYPE.
1—Buflovak 588 sq. ft. dbl. effect, T304 SS, size #6.5-29-D.
1—F. J. Stokes 118 sq. ft. single effect, T316 SS, U-tube still.
2—Rogers 6' dia. vacuum pans, T304 SS, int. coils.

HEAT EXCHANGERS — CONDENSERS

1—1960 sq. ft. T316 SS, horiz. exchanger, ASME 75# WP.
1—1450 sq. ft. T316 SS vert. condenser, remov. bundle.
3—800 sq. ft. T316 SS vert. condensers, ⅝" OD tubes.
1—800 sq. ft. T316 SS vert. condenser, 1" OD tubes.
1—730 sq. ft. T316 SS horiz. exchanger, remov. bundle.
1—510 sq. ft. T316 SS vert. cond., remov. bundle.
4—T316 SS exchangers-condensers: 427, 425, 410, 400 sq. ft.
10—T316 SS exchangers-condensers: 290, 277, 264, 250, 200, 185, 165, 150, 145, 105 sq. ft.
8—T316 SS exchangers, 83, 73, 54, 52, 50, 47, 30 sq. ft.
10—Enzinger 185 sq. ft. T304 SS contin.-flow exchangers.

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5—BUFLOVAK 42" x 120" DOUBLE DRUM DRYERS, ASME 160# WP.
2—BONNET 7' x 60' ROTARY HOT-AIR DRYERS, ⅜" SHELL, COMPLETE.
1—BONNET 6' x 52' ROTARY HOT-AIR DRYER, 5/16" SHELL, COMPLETE.
2—SWEETLAND #12, (24) 36" DIA. LEAVES, 336 SQ. FT.
6—SHRIVER 48" CAST IRON P. & F. FILTER PRESSES, 50 CHAMBERS.
4—DAVENPORT #2A DEWATERING PRESSES, VARI-DRIVE, MOTOR, ETC.
3—DAVENPORT #1A DEWATERING PRESSES, VARI-DRIVE, MOTOR, ETC.
2—FRENCH OIL SCREW TYPE EXTRACTION PRESSES, 60 HP.
2—QUADRUPLE EFFECT EVAPORATORS, CALANDRIA TYPE, 4050 SQ. FT., CAST IRON BODIES & COPPER TUBES. WITH 1230 SQ. FT. HORIZ. COPPER PREHEATERS & 2450 SQ. FT. PANS. TOTAL 19,900 SQ. FT. EACH EVAP.
6—ANSONIA 691 SQ. FT. HORIZ. DBL. PIPE COOLERS, COPPER TUBES.
3—AMERICAN 654 SQ. FT. SPIRAL STEEL HEAT EXCHANGERS.
18—TUBULAR HEAT EXCHANGERS, COPPER TUBES, 1500, 1350, 1130, 637, 380, 290, 184, 176, 156 SQ. FT.
1—ACME 96" DIA. X 44' HIGH COPPER BEER STILL COLUMN, (20) PERFORATED & (4) BUBBLE CAP TRAYS.
5—LEADER 96" DIA. STEEL RECTIFYING COLUMNS, 44' X 51' HIGH.
2—9500 GAL. HORIZ. STEEL COOKERS, ½" SHELL & DISHED HEADS, AGIT.

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CENTRIFUGES

2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
1—Bird 32" x 50", Solid Bowl, Continuous, 316 S.S.
1—Bird 36" x 50" solid bowl continuous, 347 SS.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
1—Tolhurst 26" susp. Rubber Imperforate Basket.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—Pfaudler 100 gal. glass lined jacketed agitated Reactor.
1—150 gal. 304 S.S. jacketed agitated Reactor.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—Pfaudler 12" wiped film Evaporator.
1—700 sq. ft. Buflovak 304 SS forced circulation Evaporator.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7'x25', 50 psi.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
4—1,000 gal. 304 SS Tanks 5'6" x 6'.
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Hercules 400 sq. ft. 304 SS pressure Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Eimco 18" x 12" 316 S.S. Rotary Vacuum Filter with pumps and piping.
1—Oliver 3' x 2' 347 S.S. Rotary Vacuum Filter.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.
4—36" x 36" alum. P & F, 65 Chambers, 1-1/2 cake, hyd. clos.

DRYERS

1—Buflovak Vacuum Shelf with 20—60"x80" shelves.
1—Devine Vacuum Shelf with 10—40"x43" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
2—Buflovak 5' x 30', 3' x 7'6" Rotary Vacuum Dryers 316 S.S.
2—Louisville Rotary Steam Tube 5'x25', 6'x35' 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 10' wide Apron Conveyor Dryer 48' long.

MIXERS

1—Farrel-Birmingham "Midget" Banbury Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
1—Baker Perkins 10 gal. jacketed 304 S.S. double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—Stokes 21K, 304 S.S. Granulating Mixer 82 gals.

MISCELLANEOUS

1—Farrel Birmingham, 8" x 16", 2 Roll Chrome Plated Mill.
4—Mikro Pulverizers, #4TH, 1SH, 1SI and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.
5—Day Roball Sifters 40" x 120", 40" x 84", double deck.
1—#81 Day Roball Sifter 40" x 120" single deck.
3—Nash H6 Vacuum Pumps.
25—Chlorimet, Durimet and Duriron Centrifugal Pumps 1½" to 6".

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35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

EQUIPMENT
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1—Proctor & Schwartz apron dryer, 2' x 20', S.S.

10—Robinson SS double ribbon horizontal blenders, 125 cu. ft.

5—Robinson SS double ribbon horizontal blenders, 255 cu. ft.

1—Patterson-Kelley SS twin shell blender, 155 cu. ft. complete with motor.

1—Cleveland SS double cone blender, complete with drive and motor, 85 cu. ft.

1—Cleveland steel jacketed horizontal double ribbon blender, 60 cu. ft.

1—Gemco double cone conical blender, 40 cu. ft.

1—Richmond Eng. type 316 SS blender, 40 cu. ft.

2—Sturtevant SS #7 dustite rotary batch blenders, NEW.

1—Patterson-Kelley SS twin shell blender, 1 cu. ft., complete with motor.

1—Buflovak chrome plated 24" x 36" double drum dryer with all stainless steel contact parts, NEW.

1—Baker Perkins Size 16 UUEM jacketed mixer, double arm dispersion type, complete with compression cover and 100 HP motor, 150 gal. capacity.

1—Baker Perkins Size 15, 100 gal. SS jacketed double arm sigma blade mixer.

1—Banbury #1 mixer, chrome plated rotor, with 50 HP motor.

2—Louisville SS rotary dryers, 8' x 50'.

1—Allis Chalmers SS rotary dryer, 6' x 50'.

1—Hersey SS rotary dryer, 3' x 16'.

1—Buflovak SS jacketed rotary vacuum dryer, 3' x 15'.

1—Stokes steel jacketed rotary vacuum dryer, 5' x 30'.

2—Buflovak SS rotary vacuum dryers, 5' x 30'.

1—American 42" x 120" double drum dryer, ASME, N.B. complete with drives and motors.

1—Williams "Comet" 4 roll mill, complete.

7—Western States 40" type 316 SS suspended type centrifuges, complete with perforated baskets, plows and 40 HP motors.

4—Tolhurst 40" center slung rubber covered centrifuges, with perforate baskets and motors.

4—Tolhurst 30" center slung rubber covered centrifuges, with perforate baskets.

20—Davis Engineering SS heat exchangers, 102, 119, 136 and 166 sq. ft., NEW.

1—Stainless steel bubble cap column, 4' dia. x 25' plates.

2—Struthers Wells type 316 SS 1000 gal. jacketed reactors, complete with agitators and drives.

1—Stainless steel open top kettle, 2500 gals.

1—Tolhurst SS 26" center slung centrifuge, with perforate basket.

2—Mikro #3TH stainless steel pulverizers.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

NEW 4000 Gal. STAINLESS TANK
DAY HY-R SPEED MILL
BUFFALO 32" x 90"
DOUBLE DRUM DRYER

CENTRIFUGALS—12" 30" 40" & 48".
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FILTER PRESSES—6" to 36" Iron & Wood.
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Dopp 350 gal. Cast Iron Jack. Vacuum.
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2—Sparkler model 33-S-17 rubber lined filters.

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1—40" suspended centrifuge with perforated rubber basket.

2—Stainless steel vertical tanks 1200, 1000 gallons.

2—Ross 100 gallon jacketed double arm mixers, hydraulic tilt.

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chemical & process machinery corp.
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17,500 gal. 15'x16'OA Flat top, cone bot.
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Kettle—20 Gal. Lead Lined.
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Colors of Small Volume: Additive Victims

—Continued from page 3

tutes for the FD&C colors that have been delisted by the FDA, as well as to carry on the testing of the colors on the D&C and Ext. D&C lists.

Also, he added, there are many colors that have never been certified and these, plus those on the D&C and Ext. D&C lists, present a unique problem. They are produced in many varying shades for specific end uses.

He said that he believed that the first thing industry will have to do is substitute the colors that have been cleared for those still untested where possible and then review the economic aspects of each color—whether it is worth the cost of running the tests required by law.

The Manufacturer's Dilemma

Mr. Schram explained that it will come as a major problem to many manufacturers whether to go into the expense of running safety tests which may cost upwards of $100,000 for a product of low market demand, but still of great importance to a valued customer.

Speaking for the Toilet Goods Association, Fuller Holloway proposed that industry gather a group of emminent pharmacologists together to meet with a similar group from FDA to determine the areas where testing is needed, and to exchange scientific information on this subject.

He said that TGA now pretty well knows what colors are vital and necessary, but it is only when the industry knows what is to be required by FDA can the economics of the situation be considered.

John Harvey, Deputy Food & Drug Commissioner, offered the full cooperation of the FDA in meeting with any industry group that desired to discuss the problems.

He thought that both the drugs group and the toiletries group could work out some arrangements for working with FDA on the problem and urged Mr. Schram to serve as the contact for bringing the groups together.

Tests With FD&C No. 1

A highlight of the meeting was a discussion of the testing that FDA has done thus far on FD&C Red No. 1. Dr. Arnold J. Lehman, chief of the Division of Pharmacology, disclosed that of twenty-four rodents fed this color at a level of 5 percent of the diet, all have developed tumors, some malignant, some benign.

At least one of the test dogs has developed severe liver damage, he said. He volunteered the information that indications are that this color may be classed as a carcinogen.

Dr. Lehman's conclusion brought sharp protests from several of the industry people who accused the agency of delisting FD&C Red No. 1 without all the concluding evidence at hand.

Questioning developed that the control animals used in the study were still alive so that no one knows yet whether they too may have tumors.

This prompted a biting remark from Guy Bates of Bates Chemical Company, one of the three producers of this color, that FDA has "practically written off" FD&C Red No. 1 within the past few minutes without any concluding evidence. He said that officials should be more careful of their statements.

Mr. Harvey replied that no conclusions have yet been drawn by the agency on this color nor would there be any until the tests have been complete.

Whether or not the color might prove to be a carcinogen is a decision that will have to be based on scientific judgment, he said.

He added that regardless of this question the evidence does show possibilities of severe liver damage which of itself raises a serious question of safety of the product.

The protocols which FDA feels might be necessary to clear color additives under the law were outlined to the conference by FDA officials.

For color additives to be used in foods, these tests were proposed:

- Acute oral toxicity tests with two species of animals.
- Chronic oral toxicity tests with one strain of rats for two years.
- Chronic oral toxicity tests with dogs for two years.
- Subcutaneous injections in rats at one level for two years.

Depending on results these other possibilities are proposed:

- Chronic oral toxicity tests with an additional strain of rats.
- Chronic oral toxicity tests with two strains of mice.
- Skin painting of mice at one level.
- Longer chronic toxicity testing with dogs.

The inclusion of subcutaneous injections among the first group of tests was vigorously protested by Mr. Schram and others. They also questioned the use of rats for tests of this kind and questioned the injection requirement itself.

Mr. Schram said he had hoped that FDA would take a more rational approach to the testing requirements of the law.

FDA Responds to Protests

As a result of the protests, FDA changed the listing to place subcutaneous injection testing among the group of "possible" testing.

With respect to color additives for use in drugs to be taken internally, the protocal calls for the same testing as for colors to be used in foods, except that the testing would run for longer periods.

For color additives for cosmetics to be applied to the skin or hair, the following is proposed:

- Acute oral toxicity with two species of animals.
- Skin application with rabbits abraded for twenty days.
- The same with rabbits intact for 90 days.
- Skin painting of mice for two years at one level.
- Sensitization tests on humans (use experience would be sufficient in this case).

For color additives in cosmetics applied to the lips:

- The same first four tests for cosmetics applied to the skin.
- Chronic oral toxicity tests with rats for two years.
- Chronic oral toxicity tests with dogs for two years.
- Subcutaneous injections in rats for two years at one level.

Rules for Mucous Membranes

For color additives applied to mucous membranes:

- Acute oral toxicity tests with two species of animals.
- Topical application to mucous membranes for which intended for three weeks at the same concentrations.
- Skin painting of mice for two years at one level.

A preliminary draft of the proposed general regulations to be issued under the color additives law was also distributed at the meeting and all interested persons were invited to submit their comments to the commissioner for study before they become effective.

In many respects, the regulations are similar to those issued under the food additives law.

One difference, however, is in the application of the Delaney cancer clause. Whereas the food additive regulations do little more than recite the language of the clause, FDA has attempted in the color additives regulations to spell out its understanding of the law that whether or not cancer is produced by a particular substance is one of scientific judgment and the Delaney clause does not apply unless it can be demonstrated that a substance is a carcinogen.

Montecatini Progressing

—Continued from page 3

expansion of Montecatini's nearby Bussi plant will permit conversion of the gas into organic chemicals.

- A new group of research and application laboratories at Codogno to service the organic intermediates plant.
- A synthetic ammonia unit at Priolo in the province of Syracuse, Sicily.
- Approaching start-up of a major diammonium phosphate unit at the Porto Marghera works near Venice.
- New units at Linate near Milan to increase fungicide output to 15,000 metric tons per year.
- Plans to double output of potassium salts at the company's mine in Sicily.

IMPORTS at United States Ports

New York

AGAR—74 cs, T M Duche & Sons, Leixoes
ALUMINUM POWDER—20 dms, B F Drakenfeld & Co, Bremen
ANILINE DYES—24 dms, Sandoz Inc, Bremerhaven
73 dms, Geigy Chemical Corp, Havre
6 dms, H Bruckmann & Lorbacher, Hamburg
6 dms, Geigy Chemical Corp, Bremerhaven
ANISE SEED—100 bgs, Izmir
ANTIMONY—40 kgs, Watson Geach, Liverpool
100 cs, C Tennant Sons & Co, Havre
213 cs, Havre
ARABIC GUM—500 bgs, Nehls & O'Connell, Port Sudan
200 bgs, Port Sudan
ARNICA FLOWERS—18 bgs, Alicante
BALSAM—10 dms, Gillespie & Co, La Libertad
5 dms, Polarome Manufacturing Co, La Libertad
BEESWAX—31 bgs, Wm Diehl & Co, Talcahuano
45 bgs, Irving Trust Co, Havana
40 bgs, H H Pike & Co, Havana
30 bgs, General Import Distributors, Havana
11 bgs, Baldini & Co, Casablanca
232 bls, Djibouti
600 bls, Lisbon
250 bgs, Ciudad Trujillo
BELLADONNA LEAVES—20 bls, S B Penick & Co, Rijeka
BELLADONNA ROOT—20 bgs, S B Penick & Co, Rijeka
BLANC FIXE—400 bgs, Smith Chemical & Color Co, Antwerp
BOIS DE ROSE OIL—8 dms, Hollander Trading Corp, Belem-Para
BONE CHARCOAL—100 bgs, Martin Baer & Co, Lisbon
CALCIUM CARBONATE—1,000 bgs, Whittaker Clark & Daniels, London
360 bgs, J T Baker Chemical Co, London
CALCIUM HYPOCHLORITE—520 dms, Yokohama
CAMPHOR OIL—10 dms, National City Bank, Yokohama
CARAWAY SEED—200 bgs, R J Spitz, Rotterdam
700 bgs, Rotterdam
CARDAMOMS—50 bgs, Wm E Martin & Son, Puerto Barrios
CARNAUBA WAX—28 bgs, J W Hanson & Co, Fortaleza
200 bgs, Cornelius Wax Refining Corp, Fortaleza
112 bgs, M Argueso & Co, Fortaleza
154 bgs, S C Johnson & Son, Fortaleza
CASEIN—418 bgs, A J Mills & Co, Wellington
2,530 bgs, A J Mills & Co, Auckland
1,383 bgs, A J Mills & Co, New Plymouth
90 bgs, Spice Co of America, Rotterdam
3,612 bgs, Auckland
CASSIA—82 bgs, Internatio Rotterdam, Singapore
2,733 bls, Rotterdam
CASTOR OIL—300 tons, Wallace & Tiernan, Fortaleza
CELERY SEED—255 bgs, Fritzsche Bros, Bombay
176 bgs, Otto Gerdau, Bombay
CETYL STEARYL ALCOHOL—200 bgs, Arista Industries Inc, Yokohama
CHESTNUT EXTRACT—1,217 bgs, Barkey Importing Co, Genoa
CINNAMON BARK—100 bgs, Kellys America Ltd, London
CITRONELLA OIL—75 dms, Givaudan Corp, Keelung
25 dms, Fritzsche Bros, Keelung
25 dms, Lo Curto & Funk, Puerto Barrios
COCONUT OIL—300 tons, Pacific Vegetable Oil Corp, Manila
750 tons, American Trust Co, Cebu
500 tons, Manila
CORIANDER OIL—6 cs, Delgo Aromatic Co, Havre
CORN STARCH—300 bgs, Manhattan Adhesives Corp, Antwerp
1,200 bgs, Impex Agricultural Corp, Rijeka
2,800 bgs, Antwerp
CREAM OF TARTAR—1,120 bgs, Leonhardt & Brush, London
CUMIN SEED—72 bgs, Hismoco American Co, Izmir
144 bgs, Izmir
CUTTLEFISH BONE—100 cs, Tripoli
DAMMAR GUM—210 bgs, Chase Manhattan Bank, Singapore
140 bgs, O G Innes Corp, Singapore
DEGRAS—5 dms, James E Fox, Genoa
DEXTRIN—550 bgs, Morningstar Paisley Inc, Rotterdam
1,097 bgs, Stein Hall & Co, Rotterdam
DIBUTYL TIN OXIDE—5 dms, International Engineers Inc, Kobe
FENUGREEK SEED—150 bgs, Wm E Martin & Son, Casablanca
438 bgs, Casablanca
FISHLIVER OIL—10 dms, Wilbur Ellis Co, Yokohama
20 dms, Mitsubishi Corp, Yokohama
10 dms, Kanematsu N Y Inc, Yokohama
FISHMEAL—4,348 bgs, H J Baker & Bro, Callao
4,000 bgs, Marine Midland Trust Co, Chimbote
FUEL OIL—122,921 bbls, Humble Oil Co, Las Piedras
119,510 bbls, Humble Oil Co, Caripito
121,371 bbls, Hess Inc, Maracaibo
196,421 bbls, Signal Oil & Gas Co, Amuay Bay
99,220 bbls, Metropolitan Petroleum Corp, San Lorenzo
GALL—3 cks, S S Svendsen, Auckland
4 dms, S S Svendsen, Bluff
3 dms, Ovimpex Inc, Lytteltown
3 dms, Ovimpex Inc, Wellington
2 dms, Ovimpex Inc, New Plymouth
GELATIN—100 bgs, G G Lipplegoes, Liverpool
73 dms, B Young, London
150 bgs, Manhattan Adhesives Corp, Hamburg
135 bbls, Antwerp
50 cks, Havre
GERANIUM OIL—4 dms, George Lueders & Co, London
1 dm, Marseille
GINGER ROOT—200 bgs, Kellys America Ltd, London
GRAPHITE—695 bgs, Asbury Graphite Mills, Hong Kong
GUAR GUM—2,214 bgs, Stein Hall & Co, Karachi
3,600 bgs, Calcutta
229 bgs, Karachi
GYPSUM, CRUDE—9,983 tons, U S Gypsum Co, Little Narrows
10,026 tons, U S Gypsum Co, Hantsport
HALIBUTLIVER OIL—23 dms, Arista Oil Products Corp, Yokohama
HEPTANOIC ACID—1 dm, International Selling Corp, Marseille
HOOF & HORNMEAL—445 bgs, Martin Baer & Co, Piraeus
IRISH MOSS—150 bls, H Reifenberg, Havre
68 bls, Stockheimer & Hardener, Havre
IRON OXIDE—224 bgs, Landers Segal Color Co, Liverpool
448 bgs, Landers Segal Color Co, London
JUNIPER BERRIES—84 bgs, K H Landes & Co, Leghorn
KAOLIN—50 dms, E Fougera, London
KARAYA GUM—394 bgs, Colony Import & Export Corp, Bombay
248 bgs, Stein Hall & Co, Bombay
66 bgs, Meer Corp, Bombay
124 bgs, Nehls & O'Connell, Bombay
66 bgs, Paul A Dunkel, Bombay
KAURI GUM—56 bgs, S Winterbourne & Co, Auckland
LAUREL LEAVES—247 bls, M J Golombeck, Izmir
101 bls, Chemical Bank, Piraeus
LAVANDIN OIL—1 dm, Lo Curto & Funk, Cannes
3 dms, Mane Fils Inc, Cannes
25 dms, Marseille
LAVENDER FLOWERS—50 bls, Meer Corp, Marseille
LAVENDER OIL—3 dms, Ungerer & Co, Marseille
LEMONGRASS OIL—30 dms, Lo Curto & Funk, Puerto Barrios
LOCUST BEAN GUM—100 bgs, Nehls & O'Connell, Genoa
180 bgs, Stein Hall & Co, Genoa
LOGWOOD EXTRACT—25 dms, American Dyewood Co, Kingston
MALEIC ANHYDRIDE—3 kgs, Allied Chemical Corp, Southampton
MAGNESITE—380 bgs, Cochin
MELAMINE—200 bgs, Amplex Chemical Co, Yokohama
MENTHOL—20 cs, Kane Import Corp, Keelung
25 cs, Magnus Mabee & Reynard, Keelung
45 cs, George Uhe Co, Keelung
15 cs, Manufacturers Trust Co, Keelung
60 cs, American Far Eastern Syndicate, Santos
50 cs, Lo Curto & Funk, Santos
MERCURIC AMMONIUM CHLORIDE—1 cs, E T Browne Drug Co, Southampton
MERCURIC OXIDE—2 cs, E T Browne Drug Co, Southampton
MONTAN WAX—30 bgs, Rotterdam
MUSK XYLOL—50 kgs, Compagnie Parento Inc, London
MUSTARD SEED—200 bgs, Berns & Koppstein, Copenhagen
300 bgs, D Young, Copenhagen
1,000 bgs R T French, Copenhagen
400 bgs, C Gulden, Copenhagen
378 bgs, C Gulden, Lonoon
NAPHTHALENE—1,155 bgs, J N Forker, Liverpool
720 bgs, Witco Chemical Co, Liverpool
1,079 bgs, Marine Midland Trust Co, Liverpool
1,023 bgs, Hudson Shipping Co, Antwerp
NUTMEG—70 bgs, M J Golombeck, Singapore
140 bgs, K H Landes & Co, Singapore
140 bgs, Singapore
275 bgs, Rotterdam
NUX VOMICA—480 bgs, Volkart Bros, Cochin
78 bgs, S B Penick & Co, Madras
OLEORESIN PAPRIKA—10 dms, Alicante
OREGANO LEAVES—220 bgs, Marine Midland Trust Co, Piraeus
173 bgs, Atlantic Bank of N Y, Piraeus
200 bgs, M J Golombeck, Piraeus
PALM OIL—255 tons, Balfour Guthrie, Belawan Deli
301 tons, Balfour Guthrie, Boma
PALMKERNEL OIL—199 tons, Balfour Guthrie, Matadi
200 tons, Matadi
PAPRIKA—200 bgs, M J Golombeck, Rijeka
425 bgs, A A Sayia, Alicante
PATCHOULI OIL—22 dms, International Flavors & Fragrances Inc, Penang
3 dms, Felton Chemical Co, Penang
3 dms, Simpson Spence & Young, London
PEPPER, BLACK—70 bgs, Singapore
PEPPER, RED—100 bgs, M J Golombeck, Kobe
a-PICOLINE—25 dms, Chase Manhattan Bank, Havre
PIMENTO—80 bgs, A G Dunn, Kingston
160 bgs, M J Golombeck, Kingston
POLLACKLIVER OIL—50 dms, Interocean Chemical & Minerals Corp, Yakohama
POPPY SEED—500 bgs, Hoger Corp, Izmir
500 bgs, Izmir
POTASSIUM FERRICYANIDE—120 bbls, Atlantic Raw Materials, Hamburg
POTASSIUM PERCHLORATE—100 dms, Gefle
SAGO FLOUR—214 bgs, Morningstar Paisley Inc, Singapore
300 bgs, Stein Hall & Co, Singapore
SAVORY LEAVES—140 bls, Split
SEEDLAC—500 bgs, United Shellac Corp, Calcutta
1,200 bgs, Calcutta
SESAME SEED—185 bgs, Levy & Levis Co, Corinto
SESAME SEED, HULLED—500 bgs, Archibald & Kendall, Corinto
600 bgs, Levy & Levis Co, Corinto
300 bgs, Nieman Bros, Corinto
350 bgs, Louis Furth, Corinto
100 bgs, Biddle Purchasing Co, Corinto
100 bgs, M J Golombeck, Corinto
SHELLAC—50 bgs, Gillespie Rogers Pyatt, Calcutta
100 bgs, Calcutta
SODIUM ARSENATE—200 dms, Orlex Dyes & Chemical Corp, Marseille
SODIUM CYANIDE—1,090 dms, Ugine Industries, Havre
SODIUM IODIDE—10 dms, London
SODIUM LAURYL SULFATE—149 cs, J J Shalam, Yokohama
SODIUM PERBORATE TETRAHYDRATE—102 bgs, Industrial Chemical & Dye Co, Marseille
SODIUM SULFATE—1,000 bgs, Impex Overseas Corp, Rijeka
SYMPHITI LEAVES—29 bls, S B Penick & Co, Rijeka
TALC—4,816 bgs, Charles Mathieu, Genoa
TAMARIND SEED POWDER—242 bgs, American Key Products, Bombay
TAPIOCA FLOUR—1,120 bgs, Stein Hall & Co, Kohsichang
TARTARIC ACID—238 bgs, Frank Samuel & Co, Marseille
THYME LEAVES—100 bgs, M J Golombeck Marseille
THYROID POWDER—5 dms, Van Gelder Fanto Corp, Copenhagen
TOLU BALSAM—25 cs, J M Rodriguez & Co, Barranquilla
5 dms, Meer Corp, Puerto Barrios
TURMERIC—70 bgs, S B Penick & Co, Madras
ULTRAMARINE BLUE—81 bgs, Whittaker Clark & Daniels, Liverpool
UNDECYLENIC ACID—34 dms, International Selling Corp, Marseille
ZINC CHLORIDE—42 dms, Antwerp

Los Angeles

CASEIN—600 bgs, Borden Co, Buenos Aires
COPRA—500 tons, Wells Fargo Bank, Dumaguete
800 tons, Procter & Gamble Co, Cebu
500 tons, Wells Fargo Bank, Cebu
500 tons, Procter & Gamble Co, Cagayan de Oro
COPRA—500 tons, Procter & Gamble Co, Medina
500 tons, Procter & Gamble Co, Dumaguete
CRYOLITE—3,800 bgs, Genoa
EARTH COLORS—1,575 bgs, Naftone Inc, Rotterdam
600 cs, H Hartry, Bremen
FISHMEAL—2,174 bgs, Marine & Animal By Products Corp, Callao
FUEL OIL—90,000 bbls, Standard Oil Co, San Nicolas
50,000 bbls, Standard Oil Co, Punta Cardon
LAUREL LEAVES—47 bls, Trieste
LOCUST BEAN GUM—100 bgs, Genoa
NAPHTHA—126,569 bbls, Union Oil Co, Matsuyama
OLIVE OIL—25 dms, Cadiz
PEPPER, RED—150 bgs, Pan Asiatic Trading Co, Kobe
POTASH, CAUSTIC—26 dms, J G Wiley, Antwerp
QUEBRACHO EXTRACT—800 bgs, Tanimex Corp, Buenos Aires
SESAME SEED—300 bgs, B C Ireland, Corinto
200 bgs, R J Spitz, Corinto
SODIUM BICARBONATE—1,197 bgs, Chemical Manufacturing Co, Liverpool
THIOUREA—100 bgs, Japan American Trading Co, Yokohama
UREA—2,000 bgs, Wilbur Ellis Co, Moji

Philadelphia

BONE—609 tons, Baugh & Son, Buenos Aires
5,914 bgs, Kind & Knox, Bombay
CELERY SEED—171 bgs, Bombay
CHESTNUT EXTRACT—300 bgs, Chase Manhattan Bank, Genoa
CORN STARCH—600 bgs, Impex Corp, Rijeka
FUEL OIL—172,086 bbls, Texaco Co, Pointe a Pierre
MAGNESITE—1,788 tons, Split
MUSTARD SEED—1,000 bgs, R T French, Copenhagen
OLIVE OIL—25 dms, Phila National Bank, Seville
30 dms, Chase Manhattan Bank, Seville
TAPIOCA FLOUR—672 bgs, Stein Hall & Co, Kohsichang
TRICHLOROETHYLENE—20 dms, Hamburg
UREA—1,102 bgs, Nylos Trading Co, Genoa

San Francisco

AGAR—10 bls, Lees Agency, Kobe
AMMONIUM BICARBONATE—200 bgs, Mattoon & Co, Amsterdam
AMMONIUM CHLORIDE—348 bgs, Chemical Manufacturing Co, Liverpool
ALUMINUM SULFATE—200 bgs, Chemical Manufacturing Co, Liverpool
BLEACHING POWDER—100 dms, Chemical Manufacturing Co, Liverpool
CASEIN—400 bgs, J R Spellacy, Sydney
200 bgs, First Spice Co, Rotterdam
EARTH COLORS—225 bgs, Naftone Inc, Bremen
FUEL OIL—72,000 bbls, Standard Oil Co, Aruba
GELATIN—40 bbls, Coignet Chemical Co, Antwerp
IRON OXIDE, SYNTHETIC—3 dms, Dow Chemical Co, Gothenburg
MINERAL LUBRICATING OIL—200 dms, Asiatic Petroleum Corp, Rotterdam
PEPPER, BLACK—140 bgs, Singapore
PETROLEUM, CRUDE—274,753 bbls, Standard Oil Co, Dumai
POLYVINYL ALCOHOL—620 bgs, Marubeni Iida Co, Kobe
SODIUM BICARBONATE—350 bgs, Chemical Manufacturing Co, Liverpool
TAPIOCA FLOUR—610 bgs, H M Newhall & Co, Kohsichang
TRICHLOROETHYLENE—100 dms, Chemical Manufacturing Co, Liverpool

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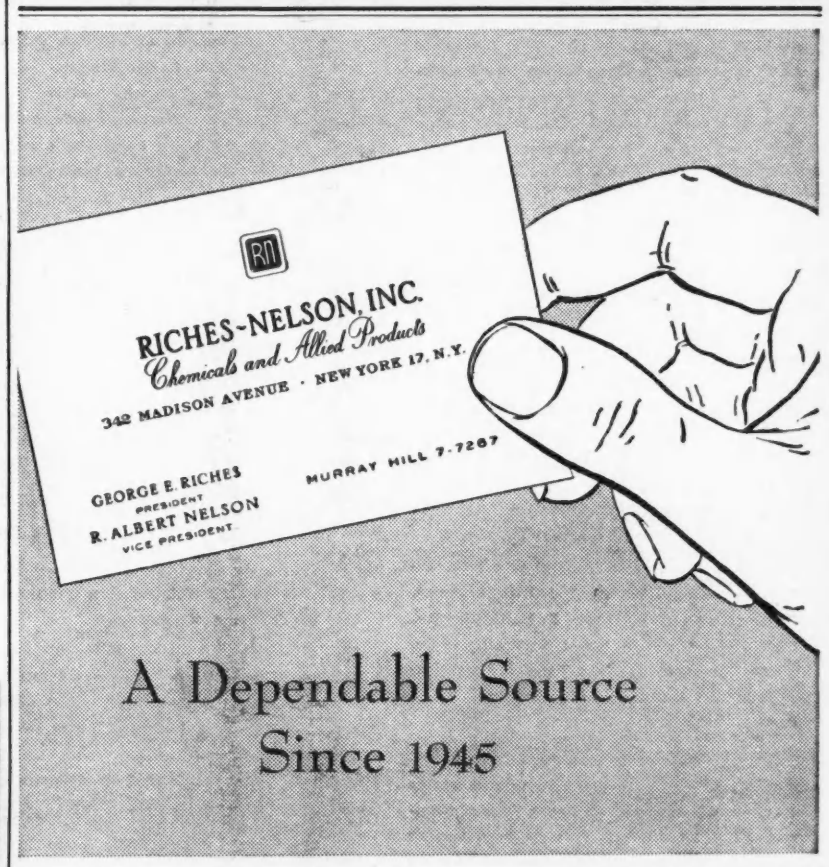

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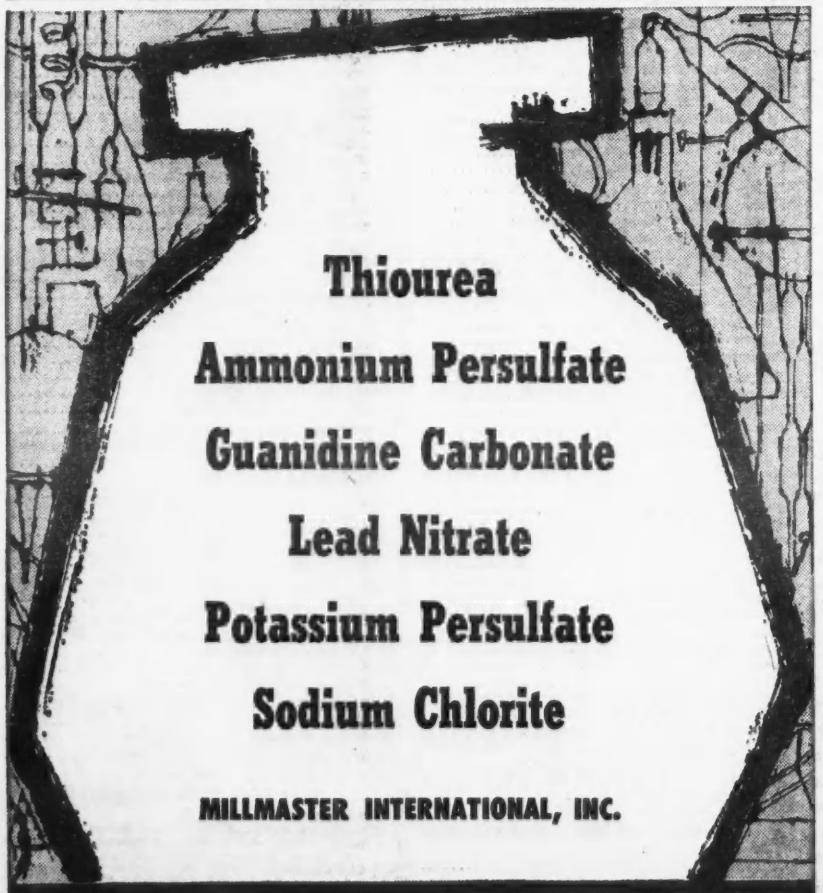

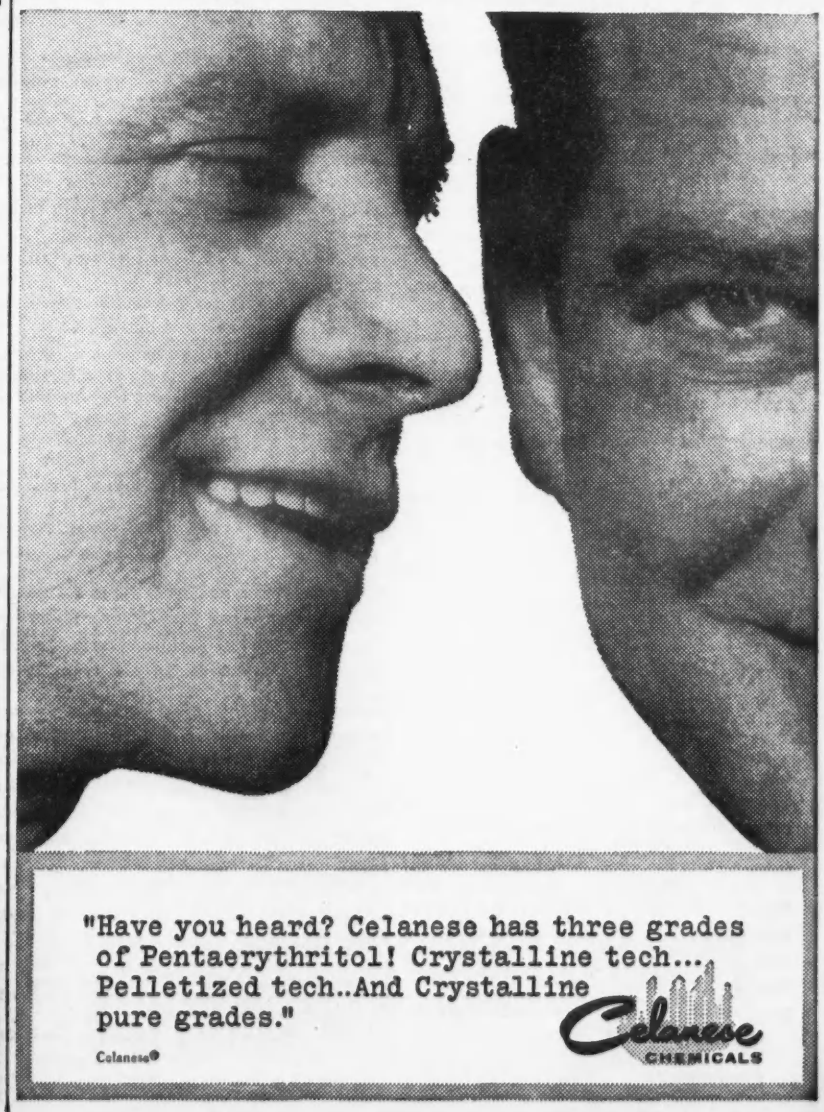
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